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# HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1971

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UNITED STATES  
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MISCELLANEOUS  
PUBLICATION  
NUMBER 1383

PREPARED BY  
SCIENCE AND  
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## ABSTRACT

Burford, James B., Jane L. DeLashmutt, and Ralph T. Roberts. 1980. Hydrologic data for experimental agricultural watersheds in the United States, 1971. U.S. Department of Agriculture, Miscellaneous Publication No. 1383, 509 pp.

Hydrologic data from 145 agricultural watersheds for calendar year 1971 are summarized in this publication. Daily and monthly total precipitation and streamflow together with annual maximum peak discharge and maximum runoff for selected time intervals are included. Watershed descriptive information is presented. Maximum and minimum daily temperatures are given for many of the watersheds. This is the 15th publication in this series.

**KEYWORDS:** Air temperature, hydrology data, hydrology research, precipitation, streamflow, water data, watersheds.

Science and Education Administration  
U.S. DEPARTMENT OF AGRICULTURE  
In Cooperation With  
State Agricultural Experiment Stations

# HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1971

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UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

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## PREFACE

This publication presents basic data on monthly precipitation and runoff; annual maximum discharge and maximum volumes of runoff; daily precipitation and mean daily discharge, with daily air temperature for some areas; and selected runoff events, with associated data on rainfall, land use, and antecedent conditions for agricultural watersheds where research was in progress during 1971. It is a continuation of processing and releasing hydrologic data of general interest collected cooperatively with other agencies.

Throughout the watershed studies the State agricultural experiment stations have collaborated in selecting, planning, and conducting these studies. In several studies the U.S. Geological Survey and State and local agencies, such as State water boards and highway departments of local drainage and conservation districts, have assisted in the work. The classification and correlation of soils and evaluation of other watershed characteristics in the descriptions have been based mostly on field surveys by the U.S. Department of Agriculture's Soil Conservation Service.

These data were collected originally for specific research objectives, which are still in progress or have been attained. In addition, they can serve many other purposes. This publication provides information for other government agencies, university staff members, graduate students, private engineers, and those who need detailed, factual information concerning agricultural watersheds. High-quality hydrologic data such as these have historic value in addition to providing a basis for research and design and evaluation of projects and programs for conservation and development of the Nation's water resources.

Although the data on which this publication is based were collected in 1971 or earlier, the findings are still valid and are used for further research on agricultural watersheds.

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The decimal system of paging is used to index the watershed data. Pages are numbered at the bottom according to location and watershed number, and the data for each watershed are given on one or more pages. For example, page 10.001-1 is location 10 (Watkinsville, Ga.), Watershed 1 (W-1 at Watkinsville), and page 1 of the data for that watershed. For convenience in finding items listed in table 3, pages are also numbered consecutively at the top.

Table 3 is a list of continuing or new watersheds by State, locality, assigned location number, and land resource area, with number of watershed units and selected runoff events reported for 1971 in this publication. Table 4 includes similar data on discontinued watersheds.

# Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1971

This is the 15th publication in the series on hydrological data by the Science and Education Administration - Agricultural Research (SEA-AR) (formerly Agricultural Research Service (ARS)). The first three are described in the following section and the others are summarized in table 1. Since the decimal paging system used (see explanation on preceding page) is consistent with that at the bottom of pages in the other 14 publications, previously published records and general descriptions can be readily found and consulted.

This publication contains selected hydrologic data from 145 watersheds for 1971. It includes data on monthly precipitation and runoff for all the watersheds; annual maximum discharge and maximum volumes of runoff for intervals of 1, 2, 6, and 12 hours and 1, 2, and 8 days for 135 watersheds; daily precipitation for 145 watersheds; mean daily discharge for 144 watersheds; daily maximum and minimum air temperatures for 18 watersheds; and detailed information on 1 or more selected typical storm events for 122 watersheds.

Information on selected storm events includes (1) tabular data for antecedent rainfall and runoff; (2) data on rainfall intensity and runoff for the event and on accumulated depth of rainfall and runoff; (3) description of watershed conditions at the time of the selected events; and (4) plottings of runoff hydrographs and rainfall histograms.

For newly established watersheds, descriptions of watershed physical characteristics, instrumentation, land management, and recommended area of application of the results are given as well as graphs and maps.

The first 11 publications in this series resulted from the cooperative efforts of several former ARS watershed research projects and the editing staff in Beltsville, Md. Hydrologic data were summarized, arranged according to standardized formats, recorded on preprinted data sheets, and submitted to the editing office for final review, assemblage, and publication.

A computer-oriented system has been designed and developed by the Water Data Laboratory to produce camera copy sheets for these publications. This is the fourth publication that has been compiled using the computerized system. Hydrologic data submitted from research projects, in digital form and recorded by computer, are accepted by the system. The required data analyses and summaries are performed and the tables and plottings are provided within and by the system. Narrative information is incorporated into the system as upper and lower case alphanumeric data using computer-compatible word-processing equipment. The format of hand-compiled references (4-11) has been retained where practicable in the computer-compiled versions of the publications.

## PUBLICATIONS OF EARLIER DATA

Historical hydrologic data on the experimental agricultural watersheds, both terminated and active, have been previously summarized in three looseleaf publications (reprints in bound volumes) by the former Agricultural Research Service. They are described in the following three reference summaries. Beginning with the hydrologic data for 1956 through 1971, the types of data previously published separately in these three references are combined in U.S. Department of Agriculture Miscellaneous Publications 945, 994, 1070, 1164, 1194, 1216, 1226, 1262, 1330, 1370, 1380, and 1383. These 12 publications are listed in table 1 as references 4-15. These reference numbers have been assigned to simplify citations to them in this and future publications. The first three looseleaf and the first eight miscellaneous publications have been recorded on 16-mm microfilm. Copies can be made available for the cost of the film processing.

Reference 1.--"Monthly Precipitation and Runoff for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Branch, 691 pages, 1957. Includes physical descriptions and land use of 334 experimental agricultural watersheds at 60 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1955.

Reference 2.--"Annual Maximum Flows From Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 330 pages, 1958. Includes records from 322 watersheds at 59 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1957.

Reference 3.--"Selected Runoff Events for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 374 pages, 1960. Includes a sam-

pling of 1 to 6 typical runoff events from 68 watersheds at 40 locations in 25 States from 1933 through 1959. The publication has maps of each watershed, information on watershed conditions for each event, including the 30-day antecedent rainfall and runoff, and tabular as well as graphic data on each storm.

Copies of all these publications have been furnished to the Soil Conservation Service and other Federal, State, and local government agencies. They have also been distributed to State agricultural experiment stations, university libraries and engineering departments, private engineers and individuals when requested, and similar foreign institutions and individuals when requested.

Table 2 lists in which of the 15 references data are included for each watershed.

Table 3 summarizes where data for each watershed can be found in this 15th publication.

Table 4 lists the watershed units where studies were discontinued in 1970.

## FORM OF DATA PRESENTATION

The data in this publication are presented for each watershed in the following order: (1) Watershed description, if not previously published; (2) monthly precipitation and runoff; (3) average monthly precipitation and runoff for period of record; (4) annual maximum flows; (5) daily temperature extremes for some watersheds, daily precipitation, and discharge; (6) selected runoff events; (7) graphs of selected runoff events; and (8) watershed maps, if not previously published or if revised.

### Continuing Watersheds

For current watersheds for which the descriptive information has been



Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/

[illegible]

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151.--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record in E 3/	Rev. ref. No. 4/	Index to information in reference 1/--														
	Town	State					01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
15001	Staunton	VA	W-I	390.	48	55	01	02	03												
15002	Staunton	VA	W-II	2,430.	48	55	01	02													
15003	Staunton	VA	W-III	6,144.	48	55	01	02		04											
16006	Klingerstown	PA	WE-38	1,773.	68													12	13	14	15
17001	Edwardsville	IL	W-1	27.22	38	55	01	02	03												
17002	Edwardsville	IL	W-2	49.95	38	55	01	02													
17003	Edwardsville	IL	W-3	12.55	38	42	01	02													
17004	Edwardsville	IL	W-4	289.8	38	55	01	02	03												
18001	Elmwood	IL	WB-1	1.28	45	46	01														
18002	Elmwood	IL	WB-2	2.28	45	46	01														
18003	Elmwood	IL	WB-3	2.61	45	46	01														
18004	Elmwood	IL	WB-4	2.77	45	46	01														
18005	Elmwood	IL	WB-5	1.93	45	46	01														
18006	Elmwood	IL	WB-6	2.41	45	46	01														
18007	Elmwood	IL	WT-1	2.02	45	46	01														
18008	Elmwood	IL	WT-2	1.88	45	46	01														
18009	Elmwood	IL	WT-3	2.40	45	46	01														
18010	Elmwood	IL	WT-4	2.06	45	46	01														
18011	Elmwood	IL	WT-5	2.76	45	46	01														
18012	Elmwood	IL	WT-6	5.35	45	46	01														
19001	Lafayette	IN	W-1	2.55	40	53	01	02													
19002	Lafayette	IN	W-2	2.23	40	53	01	02													
19003	Lafayette	IN	W-4	2.01	40	53	01	02													
19004	Lafayette	IN	W-5	2.87	40	53	01	02	03												
19005	Lafayette	IN	W-6	2.79	40	53	01	02	03												
19006	Lafayette	IN	W-7	1.96	40	53	01	02													
19007	Lafayette	IN	W-8	1.96	40	53	01	02													
19008	Lafayette	IN	W-10	2.06	40	53	01	02													
19009	Lafayette	IN	W-11	2.05	40	53	01	02													
19010	Lafayette	IN	W-12	3.37	40	53	01	02													
19011	Lafayette	IN	W-13	3.02	40	53	01	02													
19012	Lafayette	IN	W-14	2.85	40	53	01	02													
19013	Lafayette	IN	W-15	3.59	40	53	01	02													
19014	Lafayette	IN	W-18	3.24	40	53	01	02													
19015	Lafayette	IN	W-20	2.64	40	52	01	02													
19016	Lafayette	IN	W-25	3.52	40	52	01	02													
19017	Lafayette	IN	W-31	1.64	40	51	01	02													
19018	Lafayette	IN	W-32	1.83	40	51	01	02													
19019	Lafayette	IN	W-33	3.44	40	51	01	02													
19020	Lafayette	IN	W-34	3.17	40	51	01	02													
20001	Clarinda	IA	W-V	3.25	32	42	01	02													
20002	Clarinda	IA	W-W	1.97	34	42	01	02													
20003	Clarinda	IA	W-X	1.97	34	42	01	02													
20004	Clarinda	IA	W-Y	3.25	32	42	01	02													
20005	Clarinda	IA	W-Z	3.12	32	42	01	02													
21001	Iowa City	IA		1,926.	24	07	01	02	03	04	05	06	07	08	09	10	11	12			
22001	Shenandoah	IA	No. 1	128,000.	34	40	01	02													
22002	Shenandoah	IA	No. 2	67,200.	34	40	01	02													
23001	East Lansing	MI	A	1.98	41	59	01	02		04											
23002	East Lansing	MI	B	1.35	41	59	01	02		04											
23003	East Lansing	MI	W	1.65	41	59	01	02		04											
24001	Bethany	MO	Pa-A	2.03	34	42	01	02													
24002	Bethany	MO	Pa-B	5.56	32	42	01	02													
24003	Bethany	MO	Pa-C	1.97	37	42	01	02													
24004	Bethany	MO	D-1	7.51	34	42	01	02													
24005	Bethany	MO	D-2	8.03	34	42	01	02													
24006	Bethany	MO	D-3	4.48	32	42	01	02	03												
24007	Bethany	MO	I-58	2.12	33	42	01	02													
24008	Bethany	MO	IJ-1	2.13	33	42	01	02													

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--) B E 3/ 4/			Index to information in reference1/--															
	Town	State						01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
25001	McCredie	MO	S.R.W.	153.	41			07	01	02		04	05	06	07	08	09	10	11	12	13	14	15
25002	McCredie	MO	No.2	44.3	51	63		07	01	02		04	05	06	07								
26001	Coshocton	OH	102	1.26	37	46		06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26002	Coshocton	OH	104	1.33	37	46			01	02		04											
26003	Coshocton	OH	129	2.71	38	72		06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26004	Coshocton	OH	135	2.69	38	70		06	01	02		04	05	06	07	08	09	10	11	12	13		
26005	Coshocton	OH	130	1.63	38	72		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26006	Coshocton	OH	107	2.59	38	46			01	02		04											
26007	Coshocton	OH	131	2.21	38	70		06	01	02		04	05	06	07	08	09	10	11	12	13		
26008	Coshocton	OH	132	0.59	48	70		06	01	02		04	05	06	07	08	09	10	11	12	13		
26009	Coshocton	OH	134	0.92	38	47			01	02		04											
26010	Coshocton	OH	123	1.37	39			06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26011	Coshocton	OH	115	1.61	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26012	Coshocton	OH	127	1.65	49	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26013	Coshocton	OH	109	1.69	38			06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26014	Coshocton	OH	103	0.65	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26015	Coshocton	OH	110	1.27	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26016	Coshocton	OH	113	1.45	39	73		06	01	02		04	05	06	07	08	09	10	11	12	13		
26017	Coshocton	OH	118	1.96	40	73		06	01	02		04	05	06	07	08	09	10	11	12	13		
26018	Coshocton	OH	111	1.18	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26019	Coshocton	OH	121	1.42	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26020	Coshocton	OH	106	1.56	39	72		06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26021	Coshocton	OH	188	2.05	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26022	Coshocton	OH	124	2.07	39	47			01	02		04											
26023	Coshocton	OH	185	7.40	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26024	Coshocton	OH	187	7.20	41	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26025	Coshocton	OH	192	7.59	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26026	Coshocton	OH	172	43.6	39	72		06	01	02		04	05	06	07	08	09	10	11				
26027	Coshocton	OH	169	29.0	40	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26028	Coshocton	OH	177	75.6	40	71		06	01	02		04	05	06	07	08	09	10	11	12	13		
26029	Coshocton	OH	183	74.2	38	63		06	01	02	03	04	05	06	07								
26030	Coshocton	OH	196	303.	37			06	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
26031	Coshocton	OH	10	122.	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26032	Coshocton	OH	5	349.	40	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26033	Coshocton	OH	92	920.	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26034	Coshocton	OH	94	1,520.	39	71		06	01	02		04	05	06	07	08	09	10	11	12	13	14	
26035	Coshocton	OH	95	2,570.	39	72		06	01	02		04	05	06	07	08	09	10	11	12	13	14	15
26036	Coshocton	OH	97	4,580.	37	71		06	01	02	03	04	05	06	07	08	09	10	11	12	13	14	
26037	Coshocton	OH	994	17,500.	36	71		06	01	02		04	05	06	07	08	09	10	11				
26038	Coshocton	OH	174	52.8	60			06				05	06	07	08	09	10	11	12	13	14	15	
26039	Coshocton	OH	194	187.	60			06				05	06	07	08	09	10	11	12	13	14	15	
26040	Coshocton	OH	182	68.6	64	71																	
26041	Coshocton	OH	166	79.2	67																		
27001	Hamilton	OH	W-1	187.	38	44			01	02	03												
27002	Hamilton	OH	W-II	16.2	38	44			01	02													
27003	Hamilton	OH	W-III	28.8	38	44			01	02													
27004	Hamilton	OH	W-IV	20.3	38	44			01	02													
28001	Zanesville	OH	C.W.	2.55	34	45			01	02													
28002	Zanesville	OH	P.W.	3.57	34	45			01	02													
28003	Zanesville	OH	W.W.	2.23	34	45			01	02													
29001	Colby	WI	W-1	345.	49	66			01	02	03	04	05	06	07	08	09	10					
30001	Coon Valley	WI	No. 1	49,400.	34	40			01	02													
30002	Coon Valley	WI	No. 2	49,344.	34	40			01	02													
31001	Fennimore	WI	W-1	330.	38	67		07	01	02	03	04	05	06	07	08	09	10	11				
31002	Fennimore	WI	W-2	22.8	38	67		07	01	02	03	04	05	06	07	08	09	10	11				
31003	Fennimore	WI	W-3	52.5	38	67		07	01	02		04	05	06	07	08	09	10	11				
31004	Fennimore	WI	W-4	171.	38	67		07	01	02	03	04	05	06	07	08	09	10	11				

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Watershed ident. code	Study location		Watershed name-No.	Area in acres	Record Rev. (19--)			Index to information in reference1/--														
	Town	State			B	E	No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
32001	La Crosse	WI	U.P.W.	2.41	33	55		01	02													
32002	La Crosse	WI	U.C.W.	2.24	33	46		01	02													
32003	La Crosse	WI	C.W.	2.71	37	63	07	01	02		04	05	06	07								
32004	La Crosse	WI	C.K.A.	3.06	52	63	07	01	02		04	05	06	07								
32005	La Crosse	WI	E-3	1.01	33	42		01	02													
32006	La Crosse	WI	A-4	2.21	33	54		01	02													
33001	Bentonville	AR	W-1	10.03	38	43		01	02													
33002	Bentonville	AR	W-2	9.34	38	47		01	02													
33003	Bentonville	AR	W-3	14.25	38	47		01	02													
33004	Bentonville	AR	W-4	24.	39	47		01	02													
33005	Bentonville	AR	W-5	19.4	38	47		01	02	03												
33006	Bentonville	AR	W-6	10.75	39	47		01	02													
34001	Cherokee	OK	W-1	2.23	42	60		01	02		04											
34002	Cherokee	OK	W-2	4.82	42	60		01	02		04											
34003	Cherokee	OK	W-3	8.30	42	60		01	02		04											
34004	Cherokee	OK	W-4	4.35	42	60		01	02		04											
34005	Cherokee	OK	W-5	7.85	42	60		01	02		04											
34006	Cherokee	OK	W-6	1.75	42	60		01	02		04											
34007	Cherokee	OK	W-7	1.99	42	60		01	02		04											
34008	Cherokee	OK	W-8	4.72	41	60		01	02		04											
34009	Cherokee	OK	W-9	8.50	42	60		01	02	03	04											
34010	Cherokee	OK	W-10	1.68	60	67						05	06	07	08	09	10	11				
34011	Cherokee	OK	W-11	2.12	60	67						05	06	07	08	09	10	11				
34012	Cherokee	OK	W-12	1.68	60	67						05	06	07	08	09	10	11				
34013	Cherokee	OK	W-13	1.99	60	67						05	06	07	08	09	10	11				
34014	Cherokee	OK	W-14	2.16	60	67						05	06	07	08	09	10	11				
34015	Cherokee	OK	W-15	2.15	60	67						05	06	07	08	09	10	11				
35001	Guthrie	OK	W-1	33.40	32	53		01	02													
35002	Guthrie	OK	W-2	3.21	31	51		01	02													
35003	Guthrie	OK	W-3	3.13	30	51		01	02													
35004	Guthrie	OK	W-4	5.62	31	53		01	02													
35005	Guthrie	OK	W-5	5.28	31	47		01	02													
35006	Guthrie	OK	W-I	2.50	37	53		01	02													
35007	Guthrie	OK	W-II	5.09	42	55		01	02													
35008	Guthrie	OK	W-III	9.09	42	53		01	02													
35009	Guthrie	OK	W-IV	13.4	42	53		01	02													
35010	Guthrie	OK	W-V	15.7	42	53		01	02													
35011	Guthrie	OK	W-VI	94.8	42	55		01	02	03												
36001	Muskogee	OK	W-I	14.5	39	47		01	02													
36002	Muskogee	OK	W-II	65.4	39	45		01	02													
36003	Muskogee	OK	W-IV	24.9	38	47		01	02													
37001	Stillwater	OK	W-1	16.7	51	72	05	01	02		04	05	06	07	08	09	10	11	12	13	14	15
37002	Stillwater	OK	W-3	92.	51	72		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
37003	Stillwater	OK	W-4	206.	51	72		01	02		04	05	06	07	08	09	10	11	12	13	14	15
38001	Garland	TX	W-I	25.	38	47		01	02													
38002	Garland	TX	W-III	10.4	38	47		01	02													
38003	Garland	TX	W-IV	16.2	39	47		01	02													
39001	Spur	TX	W-1	11.53	27	45		01	02													
39002	Spur	TX	W-2	9.39	27	45		01	02													
39003	Spur	TX	W-3	11.71	27	44		01	02													
39004	Spur	TX	W-5	5.81	27	45		01	02													
39005	Spur	TX	W-6	6.04	27	45		01	02													
39006	Spur	TX	W-11	8.70	30	45		01	02													
39007	Spur	TX	W-12	8.41	30	45		01	02													
39008	Spur	TX	W-14	8.53	30	45		01	02													
39009	Spur	TX	W-15	6.50	30	45		01	02													
40001	Tyler	TX	W-2	9.15	43	44		01	02	03												
40002	Tyler	TX	W-3	7.94	32	42		01	02													
40003	Tyler	TX	W-4	5.75	31	42		01	02													
40004	Tyler	TX	W-5	1.73	32	42		01	02													

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record Rev. (19--) ref. B E No. 3/ 4/			Index to information in reference1/--															
	Town	State						01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
41001	Vega		TX W-1	129.	38	43			01	02													
41002	Vega		TX W-2	95.9	38	43			01	02	03												
42001	Riesel		TX A	42.	38	43			01	02													
42002	Riesel		TX C	579.	38		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42003	Riesel		TX D	1,110.	37		08		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
42004	Riesel		TX G	4,380.	38		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42005	Riesel		TX J	5,860.	37	43			01	02	03												
42006	Riesel		TX W-1	176.	37		08		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
42007	Riesel		TX W-2	130.	37		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42008	Riesel		TX W-6	42.3	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42009	Riesel		TX W-8	40.4	38	43			01	02													
42010	Riesel		TX W-10	19.7	38		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42011	Riesel		TX Y	309.	37		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42012	Riesel		TX Y-2	132.	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42013	Riesel		TX Y-4	79.9	39		08		01	02		04	05	06	07	08	09	10	11	12			
42014	Riesel		TX Y-6	16.3	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42015	Riesel		TX Y-7	40.	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42016	Riesel		TX Y-8	20.8	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42017	Riesel		TX Y-10	18.6	38		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42018	Riesel		TX SW-2	2.7	38	43			01	02													
42019	Riesel		TX SW-3	3.09	39	43			01	02													
42020	Riesel		TX SW-5	3.09	38	43			01	02													
42021	Riesel		TX SW-6	3.04	38	43			01	02													
42022	Riesel		TX SW-7	3.15	38	43			01	02													
42023	Riesel		TX SW-11	2.66	38				01	02											13	14	15
42024	Riesel		TX SW-12	2.97	38		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42025	Riesel		TX SW-13	3.19	38	43			01	02													
42026	Riesel		TX SW-14	3.02	39	43			01	02													
42027	Riesel		TX SW-16	3.17	37	43			01	02													
42028	Riesel		TX SW-17	2.99	39		08		01	02		04	05	06	07	08	09	10	11	12	13	14	15
42029	Riesel		TX SW-18	3.04	38	43			01	02													
42030	Riesel		TX Z	310.	39	43			01	02													
42031	Riesel		TX P-1	.24	38	69	08					05	06	07	08	09	10	11	12				
42032	Riesel		TX P-2	.24	38	69	08					05	06	07	08	09	10	11	12				
42033	Riesel		TX P-3	.24	38	69	08					05	06	07	08	09	10	11	12				
42034	Riesel		TX P-4	.24	38	69	08					05	06	07	08	09	10	11	12				
42035	Riesel		TX SW-19	3.25	70																14	15	
42036	Riesel		TX SW-20	3.21	70																	14	15
42037	Riesel		TX Y-13	11.3	69																13	14	15
42038	Riesel		TX Y-14	5.6	69																13	14	15
42039	Riesel		TX W-12	9.9	69																13	14	15
42040	Riesel		TX W-13	11.3	69																13	14	15
43001	Hays		KS 6L	2.85	34	38			01	02													
43002	Hays		KS AG	1.61	32	47			01	02													
44001	Hastings		NE W-3	481.	38	67	06		01	02	03	04	05	06	07	08	09	10	11				
44002	Hastings		NE W-5	411.	39	61			01	02		04	05										
44003	Hastings		NE W-8	2,086.	39	67	06		01	02	03	04	05	06	07	08	09	10	11				
44004	Hastings		NE W-11	3,490.	39	67	06		01	02		04	05	06	07	08	09	10	11				
44005	Hastings		NE 1-H	3.62	39	67	06		01	02		04	05	06	07	08	09	10	11				
44006	Hastings		NE 2-H	3.40	39	67	06		01	02		04	05	06	07	08	09	10	11				
44007	Hastings		NE 3-H	3.95	39	67	06		01	02		04	05	06	07	08	09	10	11				
44008	Hastings		NE 4-H	3.84	39	67	06		01	02		04	05	06	07	08	09	10	11				
44009	Hastings		NE 5-H	3.93	39	67	06		01	02		04	05	06	07	08	09	10	11				
44010	Hastings		NE 6-H	4.16	39	67	06		01	02		04	05	06	07	08	09	10	11				
44011	Hastings		NE 7-H	4.15	39	67	06		01	02		04	05	06	07	08	09	10	11				
44012	Hastings		NE 8-H	3.93	39	67	06		01	02		04	05	06	07	08	09	10	11				
44013	Hastings		NE 9-H	3.78	39	54			01	02													
44014	Hastings		NE 10-H	3.98	39	54			01	02													
44015	Hastings		NE 11-H	3.85	39	54			01	02													

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record Rev. (19--) ref.			Index to information in reference1/--														
	Town	State			B 3/	E 4/	No. 5/	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
44016	Hastings	NE	12-H	3.66	39	54		01	02													
44017	Hastings	NE	13-H	3.41	39	54		01	02													
44018	Hastings	NE	14-H	3.35	39	54		01	02													
44019	Hastings	NE	15-H	3.62	39	54		01	02													
44020	Hastings	NE	16-H	3.57	39	54		01	02													
44021	Hastings	NE	17-H	3.96	39	54		01	02													
44022	Hastings	NE	18-H	3.74	39	67	06	01	02		04	05	06	07	08	09	10	11				
44023	Hastings	NE	19-H	4.10	41	54		01	02													
44024	Hastings	NE	20-H	4.05	41	54		01	02													
44025	Hastings	NE	21-H	3.94	41	54		01	02													
44026	Hastings	NE	22-H	3.99	41	67	06	01	02					06	07	08	09	10	11			
44027	Hastings	NE	23-H	4.06	41	67		01	02					06	07	08	09	10	11			
44028	Hastings	NE	24-H	4.21	41	54		01	02													
44029	Hastings	NE	25-H	2.24	63	67									07	08	09	10	11			
45001	Safford	AZ	W-I	519.	39	76	07	01	02		04	05	06	07	08	09	10	11				
45002	Safford	AZ	W-II	682.	39	76	08	01	02	03	04	05	06		08	09	10	11				
45003	Safford	AZ	W-IV	764.	39	76		01	02		04	05	06		08	09	10	11				
45004	Safford	AZ	W-V	723.	39	76	07	01	02		04	05	06	07	08	09	10	11				
46001	Colorado Spr.	CO	W-1	10.6	38	46		01	02													
46002	Colorado Spr.	CO	W-2	39.7	38	46		01	02													
46003	Colorado Spr.	CO	W-3	35.4	38	46		01	02													
46004	Colorado Spr.	CO	W-4	35.6	38	46		01	02	03												
47001	Albuquerque	NM	W-I	246.	39	76	08	01	02	03	04	05	06		08	09	10	11	12			
47002	Albuquerque	NM	W-II	40.5	39	76	07	01	02		04	05	06	07	08	09	10	11	12			
47003	Albuquerque	NM	W-III	176.	39	76	07	01	02		04	05	06	07	08	09	10	11	12			
48001	Mexican Spr.	NM	W-1	187.	38	42		01	02													
48002	Mexican Spr.	NM	W-2	610.	37	42		01	02	03												
48003	Mexican Spr.	NM	W-3	1,325.	38	42		01	02													
48004	Mexican Spr.	NM	W-6	5,550.	37	42		01	02	03												
48005	Mexican Spr.	NM	W-7	8,495.	38	42		01	02													
48006	Mexican Spr.	NM	W-8	20,910.	37	42		01	02	03												
48007	Mexican Spr.	NM	W-10	17,220.	37	42		01	02													
48008	Mexican Spr.	NM	W-11	46,080.	37	39		01	02	03												
48009	Mexican Spr.	NM	W-12	2,550.	37	39		01	02													
48010	Mexican Spr.	NM	W-13	3,360.	37	39		01	02													
48011	Mexican Spr.	NM	W-14	3,560.	37	38		01	02													
48012	Mexican Spr.	NM	W-15	4,740.	37	39		01	02													
49001	Santa Fe	NM	W-I	141.	39	48		01	02	03												
49002	Santa Fe	NM	W-II	790.	39	48		01	02													
49003	Santa Fe	NM	W-III	51.6	39	48		01	02													
50001	Placerville	CA	W-1	41.	35	44		01	02	03												
51001	Santa Paula	CA	W-1	413.	38	42		01	02													
51002	Santa Paula	CA	W-3	106.	38	42		01	02													
51003	Santa Paula	CA	W-4	44.4	38	42		01	02													
51004	Santa Paula	CA	W-5	55.1	38	42		01	02													
51005	Santa Paula	CA	W-6	163.	38	42		01	02													
51006	Santa Paula	CA	H.B.R.	735.	36	42		01	02													
51007	Santa Paula	CA	L.A.	1,607.	34	40		01	02													
51008	Santa Paula	CA	H.P.R.	1,832.	34	43		01	02													
51009	Santa Paula	CA	H.A.B.	5,939.	34	37		01	02													
52001	Sebastopol	CA	W-1	83.	36	43		01	02	03												
52002	Sebastopol	CA	W-2	56.	36	40		01	02													
53001	Vacaville	CA	W-I	40.	37	42		01	02													
54001	Watsonville	CA	W-1	16.8				01	02													
54002	Watsonville	CA	W-2	18.5				01	02													
54003	Watsonville	CA	W-3	27.4	38	42		01	02	03												
54004	Watsonville	CA	W-4	10.1	38	42		01	02													

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Watershed ident. code	Study location		Watershed name-No.	Area in acres	Record (19--)	Rev. B E No. 4/	Index to information in reference1/--														
	Town	State					01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
55001	Emmett	ID	W-1	219.4	38	41	01	02													
55002	Emmett	ID	W-2	69.4	38	41	01	02	03												
56001	Moscow	ID	W-1	146.8	37	42	01	02	03												
56002	Moscow	ID	W-2	177.9	37	42	01	02	03												
57001	Newberg	OR	W-1	13.2	38	42	01	02	03												
57002	Newberg	OR	W-2	21.6	38	42	01	02													
57003	Newberg	OR	W-3	12.8	38	42	01	02	03												
57004	Newberg	OR	W-4	6.2	38	42	01	02	03												
58001	Dayton	WA	W-1	19.2	39	42	01	02													
59001	Pullman	WA	S.F.P.R.	51,900.	34	40	01	02													
59002	Pullman	WA	M.F.C.	17,600.	34	40	01	02													
59003	Pullman	WA	F.M.C.	46,000.	34	40	01	02													
60001	Pullman	WA	G.S.2	68.2	31	46	01	02	03												
60002	Pullman	WA	G.S.4	2.33	31	38	01	02													
60003	Pullman	WA	G.S.5	14.4	32	46	01	02													
60004	Pullman	WA	G.S.6	15.2	32	46	01	02													
60005	Pullman	WA	G.S.7	16,700.	32	38	01	02													
60006	Pullman	WA	G.S.8	762.	34	41	01	02	03												
60007	Pullman	WA	G.S.9	879.	41	46	01	02													
60008	Pullman	WA	G.S.10	4,430.	41	47	01	02	03												
61001	Monticello	IL	IA	82.	49	59	01	02	03	04											
61002	Monticello	IL	IB	45.5	49	59	01	02	03	04											
62001	Oxford	MS	W-4	1,580.	57	06	03	04	05	06	07	08	09	10	11	12	13	14	15		
62002	Oxford	MS	W-5	1,130.	57	06	03	04	05	06	07	08	09	10	11	12	13	14	15		
62003	Oxford	MS	W-10	5,530.	57	06	03	04	05	06	07	08	09	10	11	12	13	14	15		
62004	Oxford	MS	W-12	22,800.	57	06	04	05	06	07	08	09	10	11	12	13	14	15			
62005	Oxford	MS	W-17	32,100.	57	06	04	05	06	07	08	09	10	11	12	13	14	15			
62006	Oxford	MS	W-19	243.	57	64	06	04	05	06	07	08									
62007	Oxford	MS	W-24	512.	57	06	04	05	06	07	08	09	10	11	12	13	14	15			
62008	Oxford	MS	W-28	1,080.	57	06	04	05	06	07	08	09	10	11	12	13	14	15			
62009	Oxford	MS	W-30	113.	57	59	04														
62010	Oxford	MS	W-32	20,000.	57	06	04	05	06	07	08	09	10	11	12	13	14	15			
62011	Oxford	MS	W-34	75,000.	57	06	03	04	05	06	07	08	09	10	11	12	13	15			
62012	Oxford	MS	W-35	7,550.	57	72	06	04	05	06	07	08	09	10	11	12	13	14	15		
62013	Oxford	MS	WC-1	3.88	58	06	04	05	06	07	08	09	10	11							
62014	Oxford	MS	WC-2	1.45	58	06	04	05	06	07	08	09	10	11							
62015	Oxford	MS	WC-3	1.61	58	06	04	05	06	07	08	09	10	11							
62016	Oxford	MS	WP-4	3.01	58	63	06	04	05	06	07										
62017	Oxford	MS	W-17A	3,200.	57	06	05	06	07	08	09	10	11	12	13	14	15				
62018	Oxford	MS	W-35A	1,090.	57	06	05	06	07	08	09	10	11	12	13	14	15				
63001	Tombstone	AZ	W-1	36,900.	54	07	04	05	06	07	08	09	10		12	13	14	15			
63002	Tombstone	AZ	W-2	28,100.	54	07	04	05	06	07	09	10		12	13	14	15				
63003	Tombstone	AZ	W-3	2,220.	54	07	04	05	06	07	09	10	11	12	13	14	15				
63004	Tombstone	AZ	W-4	560.	54	07	04	05	06	07	08	09	10	11	12	13	14	15			
63005	Tombstone	AZ	W-5	5,510.	54	07	04	05	06	07											
63006	Tombstone	AZ	W-6	23,500.	62						07	08	09	10		12	13	14	15		
63007	Tombstone	AZ	6307	3,340.	66										10	11					
63008	Tombstone	AZ	6308	3,830.	63							08	09	10		12	13	14	15		
63011	Tombstone	AZ	6311	2,035.	63							08	09	10		12	13	14	15		
63015	Tombstone	AZ	6315	5,912.	65							09	10	11	12	13	14	15			
63103	Tombstone	AZ	63103	9.1	65										10	11	12				
63111	Tombstone	AZ	63111	143.	62										10	11	12				
64001	Santa Rosa	NM	W-1	42,880.	55		04	05	06	07	08	09	10		12	13	14	15			
65002	Newell	SD	W-2	115.	58	73	04	05	06	07	08	09	10	11	12	13	14	15			
65003	Newell	SD	W-3	90.	58	61	04	05													
65004	Newell	SD	W-4	105.	58	61	04	05													
65005	Newell	SD	W-5	46.	58	73	04	05	06	07	08	09	10	11	12	13	14	15			
65006	Newell	SD	W-6	30.	58	61	04	05													

See footnotes at end of table.

Table 2.--Index to information on experimental ~~agricultural~~ watersheds included in references 1-151/

Water-shed ident. code	Study location Town	State	Water-shed name-No.	Area in acres 2/	Record Rev. (19-- ) ref. B E No.			Index to information in reference 1/--															
					3/	4/	5/	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
65007	Newell	SD	W-7	160.	58	73	05				04	05	06	07	08	09	10	11	12	13	14	15	
65008	Newell	SD	W-8	160.	58	61					04	05											
65009	Newell	SD	W-9	815.	58	61					04	05											
65010	Newell	SD	W-10	280.	58	61					04	05											
65011	Newell	SD	W-11	160.	58	61					04	05											
65012	Newell	SD	W-12	90.	58	73	05				04	05	06	07	08	09	10	11	12	13	14	15	
65013	Newell	SD	W-13	160.	58	73					04	05	06	07	08	09	10	11	12	13	14	15	
65014	Newell	SD	W-14	35.	58	73	05				04	05	06	07	08	09	10	11	12	13	14	15	
65015	Newell	SD	W-15	115.	58	73	05				04	05	06	07	08	09	10	11	12	13	14	15	
65016	Newell	SD	W-16	13,000.	58	61	05				04	05											
66001	Moorefield	WV	W-1	8.57	58	67	06				04	05	06	07	08	09	10	11					
66002	Moorefield	WV	W-2	10.06	58	67	06				04	05	06	07	08	09	10	11					
66004	Moorefield	WV	W-4	6.32	58	67	06				04	05	06	07	08	09	10	11					
66005	Moorefield	WV	W-5	9.55	58	67	06				04	05	06	07	08	09	10	11					
67001	N. Danville	VT	W-1	10,610.	58						04	05	06	07	08			11	12	13	14	15	
67002	N. Danville	VT	W-2	146.	58						04	05	06	07	08			11	12	13	14	15	
67003	N. Danville	VT	W-3	2,067.	60						05	06	07	08				11	12	13	14	15	
67004	N. Danville	VT	W-4	10,752.	60													11	12	13	14	15	
67005	N. Danville	VT	W-5	27,469.	60								05	06	07	08			11	12	13	14	15
68001	Reynolds	ID	W-1	57,700.	63									07	08	09	10	11	12	13	14	15	
68002	Reynolds	ID	W-2	8,990.	65											09	10	11	12	13	14	15	
68003	Reynolds	ID	W-3	7,846.	66												10	11	12	13	14	15	
68004	Reynolds	ID	W-4	13,453.	67													11	12	13	14	15	
68011	Reynolds	ID	W-11	306.	67													11	12	13	14	15	
68012	Reynolds	ID	W-12	205.	67													11	12	13	14	15	
68013	Reynolds	ID	W-13	100.	66												10	11	12	13	14	15	
68014	Reynolds	ID	W-14	33.	67													11	12	13	14	15	
69001	Chickasha	OK	100	2,339,800.	61	78							06	07	08	09	10	11	12	13	14	15	
69002	Chickasha	OK	200	(d)2,612,500. (e) 273,000.	61	75							06	07	08	09	10	11	12	13	14	15	
69004	Chickasha	OK	400	112,910.	61	68							06	07	08	09	10						
69005	Chickasha	OK	500	(d)2,768,000. (e) 43,840.	64	78							08	09	10	11	12	13	14	15			
69006	Chickasha	OK	600	(d)3,011,800. (e) 243,050.	63	71							07	08	09	10	11	12	13	14			
69007	Chickasha	OK	700	(d)3,061,120. (e) 50,830.	61	78							06	07	08	09	10	11	12	13	14	15	
69008	Chickasha	OK	611	4,845.	61	74							06	07	08	09				13	14	15	
69009	Chickasha	OK	612	563.	61	74							06	07	08	09	10	11	12	13	14	15	
69010	Chickasha	OK	111	16,640.	61	78							06	07	08	09	10	11	12	13	14	15	
69011	Chickasha	OK	131	25,660.	61	78							06	07	08	09	10	11	12	13	14	15	
69012	Chickasha	OK	411	34,180.	61	74							06	07	08	09	10	11	12	13	14	15	
69013	Chickasha	OK	511	38,020.	61	78							06	07	08	09	10	11	12	13	14	15	
69014	Chickasha	OK	110	25,020.	63	78							07	08	09	10	11	12	13	14	15		
69015	Chickasha	OK	522	132,990.	63	73							07	08	09	10	11	12	13	14	15		
69016	Chickasha	OK	512	22,530.	63	78							07	08	09	10	11	12	13	14	15		
69017	Chickasha	OK	621	21,310.	63	73							07	08	09	10	11	12	13	14	15		
69018	Chickasha	OK	121	131,780.	63	74							07	08	09	10	11	12	13	14	15		
69019	Chickasha	OK	513	12,314.	65	78							09	10	11	12	13	14	15				
69020	Chickasha	OK	514	7,225.	67	78																	
69021	Chickasha	OK	5141	4,064.	67	78																	
69022	Chickasha	OK	5142	360.	67	74																	
69023	Chickasha	OK	5143	485.	67	74																	
69024	Chickasha	OK	5144	1,456.	67	78																	
69025	Chickasha	OK	5145	253.	67	78																	
69026	Chickasha	OK	5146	762.	67	78																	
69027	Chickasha	OK	311	15,206.	67	78													11	12	13	14	15
69030	Chickasha	OK	C-1	17.8	65	76										09	10	11	12	13	14	15	
69031	Chickasha	OK	C-2	32.5	62	75										09	10	11	12	13	14	15	
69032	Chickasha	OK	C-3	44.3	65	76										09	10	11	12	13	14	15	
69033	Chickasha	OK	C-4	29.9	65	76										09	10	11	12	13	14	15	
69034	Chickasha	OK	C-5	12.8	65	76										09	10	11	12	13	14	15	
69035	Chickasha	OK	C-6	13.0	65	76										09	10	11	12	13	14	15	
69036	Chickasha	OK	C-7	26.5	65	76										09	10	11	12	13	14	15	

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-151/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--) B 3/	Rev. ref. E 4/	Index to information in reference/--															
	Town	State					01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
69037	Chickasha	OK	C-8	27.3	65	76										09	10	11	12	13	14	15
69038	Chickasha	OK	R-1	17.8	62	74										09	10	11	12	13	14	15
69039	Chickasha	OK	R-2	24.1	62	74										09	10	11	12	13	14	15
69040	Chickasha	OK	R-3	25.8	62	74										09	10	11	12	13	14	15
69041	Chickasha	OK	R-4	18.1	62	74										09	10	11	12	13	14	15
69042	Chickasha	OK	R-5	23.7	66	77										10	11	12	13	14	15	
69043	Chickasha	OK	R-6	27.2	66	77										10	11	12	13	14	15	
69044	Chickasha	OK	R-7	19.2	66	78										10	11	12	13	14	15	
69045	Chickasha	OK	R-8	27.6	66	78										10	11	12	13	14	15	
70001	Sonora	TX	W-14	30,720.	61	73												11	12	13	14	15
70002	Sonora	TX	S-9	1,774.	61	73												11	12	13	14	15
70003	Sonora	TX	S-10	5,392.	61	73												11	12	13	14	15
70004	Sonora	TX	S-11	10,787.	61	73												11	12	13	14	15
70005	Sonora	TX	S-12	2,801.	61	73												11	12	13	14	15
70006	Sonora	TX	S-13	686.	61	73												11	12	13	14	15
70007	Sonora	TX	W-1	10.2	63													11	12	13	14	15
70008	Sonora	TX	W-2	8.6	65													11	12	13	14	15
70009	Sonora	TX	W-3	6.7	65													11	12	13	14	15
70010	Sonora	TX	W-4	4.5	66													11	12	13	14	15
70011	Sonora	TX	W-5	7.2	66													11	12	13	14	15
70012	Sonora	TX	W-6	6.9	66													11	12	13	14	15
70013	Sonora	TX	W-7	12.2	65	73												11	12	13	14	15
71001	Treynor	IA	W-1	74.5	64									08	09	10	11	12	13	14	15	
71002	Treynor	IA	W-2	82.8	64									08	09	10	11	12	13	14	15	
71003	Treynor	IA	W-3	107.	64									08	09	10	11	12	13	14	15	
71004	Treynor	IA	W-4	150.	64									08	09	10	11	12	13	14	15	
71005	Treynor	IA	W-5	389.	63	74								08	09	10	11	12	13	14	15	
72001	Cottonwood	SD	H-2	2.13	63	73									09	10	11	12	13	14	15	
72002	Cottonwood	SD	L-2	2.38	63	73									09	10	11	12	13	14	15	
72005	Cottonwood	SD	M-1	2.35	63	73									09	10	11	12	13	14	15	
73002	Fort Staunton	NM	7302	32.2	66													10				
75001	Ahoskie	NC	W-A1	36,480.	64	74									09	10	11	12	13	14	15	
75002	Ahoskie	NC	W-A2	15,360.	64	74									09	10	11	12	13	14	15	
75003	Ahoskie	NC	W-A3	2,368.	64	74									09	10	11	12	13	14	15	
75004	Ahoskie	NC	W-A4	1,664.	64	74									09	10	11	12	13	14	15	

1/ For description of references 1-15, see page 2 and table 1.

2/ (a) area changed from 63,170 acres (1-1-1967).

(b) area changed from 10,050 acres (1-1-1967).

(c) area changed from 22,656 acres (1-1-1967).

(d) = total drainage area.

(e) = total study area.

3/ B = year (19--) record began; E = year (19--) record ended.

4/ Reference in which additional or revised watershed information has been included.

published in references 1 and 4-15, the tabular data begin at the top of the first page. On each page at the top center is a sequential page number and the decimal paging system is shown at the bottom.

The geographic location associated with each study, usually a city and State, and the local name and number of the watershed are recorded at the top of the first page for each watershed. This identification is followed by detailed information on the geographic location and the size of the watershed.

In the space to the right of the first table title, MONTHLY PRECIPITATION AND RUNOFF (inches), the location and watershed number (or designation) are given.

In the table for the current calendar year, the precipitation (P) in inches is given in the monthly columns and the yearly total in the last column, headed annual. In the line below, the corresponding runoff (Q) in inches is similarly given for each month and the total for the year. For some watersheds, data are included for years previous to the current year. Underneath, in two lines, are given the (P) and (Q) station average amounts (STA AV) by months, with average annual total for the period of record.

In the second table, entitled ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS, data are also given for the calendar year listed in the first column. Under the maximum discharge heading, the date column shows the month and day that the instantaneous peak in inches per hour occurred. In computing this rate, corrections were made, where needed, for any significant pondage above the runoff-measuring device. Under the maximum volume heading, the date refers to the month and day on which the interval began; for example, if the interval began August 30 at 2359, the entry in the date column would be 8-30. The depths for

1 hour to 8 days are the annual maximum values recorded, without regard to entire clock hours or days; thus, if the 6-hour interval began at 1332, the interval would end exactly 6 hours later at 1932. The volume given is in inches of average depth over the watershed for each of the seven selected time intervals (1, 2, 6, and 12 hours and 1, 2, and 8 days). In the last section of the table, the maximum discharges and depths for the various periods are given under MAXIMUMS FOR PERIOD OF RECORD.

Notes and footnotes below the first two tables include (1) a general statement as to watershed conditions and other physical changes for the period covered; (2) location (publication) where the most recent map may be found; (3) length of precipitation and runoff records; and (4) location of the nearest long-time National Weather Service precipitation station together with the record length.

For some watersheds, tables of daily air temperature (maximum and minimum in degrees Fahrenheit), daily precipitation (inches), and mean daily discharge (cfs) are next, with explanation of the data in footnotes at the end of each table. The multiplier to convert mean daily discharge in cubic feet per second to inches per day is given as the first note to the mean daily discharge table. Co-operating agencies are identified at the bottom of the first page for each watershed just above the index page number.

If no daily tables are given, the tabular data for selected runoff events begin in the remaining space on the first page and are carried forward on continuation sheets (or pages) until completed. In general, the selected runoff events were those in which runoff was produced by a relatively uniform rainfall excess of short duration. The information for each event includes tabulation of (1) antecedent rainfall and runoff that

occurred on the day of the event prior to the beginning of the event; (2) rainfall intensities and accumulated amounts for the event; (3) runoff rates and accumulated amounts for the event; and (4) specific watershed conditions at the time of the event.

Simple graphs of rainfall and runoff rates for all events follow the tabular data. Runoff rates expressed in both cubic feet per second (CFS) and inches per hour (IN/HR) are shown on the graphs. Some very low runoff rates expressed in IN/HR are given in the "E" format, such as 7.25 E-4, which is equal to 0.000725 IN/HR.

Maps follow the graphs unless previously published in references 3-14 or unless shown herein on the map of another watershed.

In the Notes at the bottom of the first page for runoff events, the multiplier to convert runoff rates in cubic feet per second to inches per hour is given. The notes on continuation pages contain the statement on the multiplier and similar explanations of the data on each page.

### New Watersheds

For the one watershed installed in recent years and not reported previously (see table 3), the presentation begins with the watershed description in the upper part of the first page. The explanations and definitions on which the description is based are given in the next section.

The first line, centered at the top of the sheet, indicates the project location, which is the nearest city or town, and the number or name of the watershed used locally. The descriptive material is then given under the 12 major topics listed generally down the left side of the sheet: Location, Area, Slopes, Soils, Erosion, Land Capability, Geology, Surface Drainage, Character

of Flow, Instrumentation, Watershed Conditions, and Generally Represents.

After this description, the tabular data are summarized in the first two tables and notes are included as previously described for Continuing Watersheds. The tabular data for daily air temperature, precipitation, and discharge, if presented, precede the tabular data for SELECTED RUNOFF EVENTS. The rest of the material of this series for the particular watershed follows in the same order as previously indicated.

### WATERSHED DESCRIPTIONS

The following definitions and explanations were used in describing watershed location, watershed characteristics, instrumentation, land management, and recommended area of application of the hydrologic data.

LOCATION gives county and State, distance and direction of the runoff gaging station from the nearest city or town, and the major river basin in which it lies. When two or more basins are involved, the tributary or subbasin is mentioned first, followed by the major basin.

AREA of watershed is given in acres if less than 640 acres and in both acres and square miles if more than 1 square mile. If areas are revised, additional values are included with notes on date of change.

SLOPES are given in terms of the ranges commonly used in survey work in the locality. The percentages of the watershed lying in each slope class are listed. As an example, 8% is in 0-2% class means that 8 percent of the watershed area has slopes ranging from 0 to 2 percent.

SOILS are described briefly, according to definitions from the U.S. Department of Agriculture "Soil Survey Manual," Agriculture Handbook 18, published in 1951. Soil descriptions are given for the new watersheds. Soil-type name consists of the soil series plus the textural

class, determined primarily by the texture of the upper part of the soil profile.

Soil texture refers to the relative proportions of the various size groups (or separates) of individual soil grains in a mass of soil. Specifically it refers to the proportions of clay, silt, and sand less than 2 mm in diameter. The various classes of texture in order of increasing percentages of the smaller size groups are (1) sand, (2) loamy sand, (3) sandy loam, (4) loam, (5) silt loam, (6) silt, (7) sandy clay loam, (8) clay loam, (9) silty clay loam, (10) sandy clay, (11) silty clay, and (12) clay. In some of the descriptions the broader classification of coarse, moderately coarse, medium, moderately fine, and fine has been used--the coarse soils are the sands and the fine soils the clays.

Soil structure refers to the aggregation of primary soil particles into compound particles, or clusters of primary particles, that are separated from adjoining aggregates by surfaces of weakness. Structure grade, or the durability of the aggregates when subjected to disturbance, is described as structureless, weak, moderate, or strong. For some soils the structureless grade is described as massive, if coherent, or single grain, if non-coherent. The size of the aggregates is reported as very fine, fine, medium, coarse, or very coarse. Structure shape is given as being platy, prismatic, columnar, angular blocky, subangular blocky, granular, or crumb.

Permeability is the quality of a soil that enables it to transmit water or air. This quality is indicated by the terms very slow, slow, moderately slow, moderate, moderately rapid, rapid, or very rapid.

Internal soil drainage is the quality of a soil that permits the downward flow of excess water through it. Internal drainage is reflected in the frequency and duration of pe-

riods of saturation with water. It is determined by the texture, structure, and other characteristics of the soil profile and of underlying layers and by the height of the water table, either permanent or perched, in relation to the water added to the soil. Internal drainage is described as none, very slow, slow, medium, rapid, or very rapid.

Soils may be grouped into soil drainage classes, based on observations and inferences used to obtain classes of runoff, soil permeability, and internal soil drainage. These classes are given in some soils descriptions to identify internal drainage. They are very poorly drained, poorly drained, imperfectly or somewhat poorly drained, moderately well drained, well drained, somewhat excessively drained, or excessively drained.

EROSION conditions on the watershed are described according to the following classification for water and wind erosion, also briefed from Agriculture Handbook 18. The percentage of the watershed in the following erosion classes is given.

Class 1.--The soil has a few rills or places with thin A horizons that give evidence of accelerated erosion, but not to an extent to alter greatly the thickness and character of the A horizon. Except for soils having very thin A horizons (less than 8 inches), the surface soil consists entirely of A horizon throughout nearly all the delineated areas. Up to about 25 percent of the original A horizon, or original plowed layer in soils with thin A horizons, has been removed from most of the area. This class also includes the areas with no erosion.

Class 2.--The soil has been eroded to the extent that ordinary tillage implements reach through the remaining A horizon or well below the depth of the original plowed layer in soils with thin A horizons. Generally the plowed layer consists of a mixture of the original A horizon and

the underlying horizons. Mapped areas of eroded soil usually have patches in which the plowed layer consists entirely of the original A horizon and others in which it consists entirely of underlying horizons. Shallow gullies may be present. Approximately 25 to 75 percent of the original A horizon or surface soil may have been lost from most of the area.

Class 3.--The soil has been eroded to the extent that all or practically all the original surface soil, or A horizon, has been removed. The plowed layer consists essentially of materials from the B or other underlying horizons. Patches in which the plowed layer is a mixture of the original A horizon and the B horizon, or other underlying horizons, may be included within mapped areas. Shallow gullies, or a few deep ones, are common in some soil types. More than about 75 percent of the original surface soil, or A horizon, and commonly part or all the B horizon, or other underlying horizons, have been lost from most of the area.

Class 4.--The land has been eroded until it has an intricate pattern of moderately deep or deep gullies. Soil profiles have been destroyed except in small areas between the gullies. Such land is not useful for crops in its present condition. Reclamation for crop production or for improved pasture is difficult, but may be practicable if other characteristics of the soil are favorable and erosion can be controlled.

Class +.--Recent alluvial and colluvial deposition.

LAND CAPABILITY is given as classified by Klingebiel and Montgomery in U.S. Department of Agriculture "Land-Capability Classification," Agriculture Handbook 210, published in 1961. The classification expresses the suitability of land for use without deterioration. The eight land-capability classes are

distinguished according to the risk of land damage or difficulty of land use. Classes I-IV are suitable for cultivation and other uses, whereas classes V-VIII are not suitable for cultivation.

Class I.--Very good land for cultivation; nearly level and productive; not subject to erosion; needs only ordinary good farming methods.

Class II.--Good land for cultivation; mostly gently sloping; not more than moderately subject to erosion; some land may be rather wet; can be farmed safely with easily applied practices.

Class III.--Moderately good land for cultivation; mostly moderately sloping; some areas too wet or too dry; can be farmed safely with practical conservation measures, carefully applied; usually a combination of two or more measures is needed.

Class IV.--Fairly good land, suitable for occasional cultivation; generally strongly sloping; often shallow or very sandy; often found in dry climate.

Class V.--Land very well suited for grazing or forestry; requires good range or woodland management.

Class VI.--Land well suited for grazing or forestry; steeply sloping land, or stony or shallow soil; eroded, droughty, or wet land; requires careful management.

Class VII.--Land fairly well suited for grazing or forestry; severely limited in use by such factors as very steep slope, shallow or droughty soil, wetness, severe erosion, or excessive salinity; requires very careful management.

Class VIII.--Land not suitable for cultivation, grazing, or forestry; may be useful for wildlife, recreation, or protection of water supplies.

WATERSHED GEOLOGY information, when available, for new watersheds is reported here. The parts of each watershed occupied by various geological formations or series are briefly

described, together with strike and dip of the strata, thickness, and relative position, when known. Faults, perched water tables, outcrops, if present, and other details relating to the movement of water within the drainage area or affecting the hydrology of the watershed are described.

SURFACE DRAINAGE refers to the ease with which excess water flows from the watershed area. The length of the principal waterway is the distance from the gaging station to the most remote point on the watershed boundary, measured along the flood plain of the watercourse.

CHARACTER OF FLOW describes the flow of the principal watercourse with respect to permanence and space. The following definitions are from Meinzer's "Outline of Ground-Water Hydrology," U.S. Geological Survey Water-Supply Paper 494, published in 1923.

As to permanence, streams may be divided into perennial, intermittent, and ephemeral streams.

A perennial stream, or stretch of a stream, flows continuously. Perennial streams are generally fed in part by springs, and their upper surfaces usually stand lower than the water table in the localities through which they flow.

Intermittent streams may be divided, with respect to their water source, into spring-fed intermittent streams and surface-fed intermittent streams. They also flow in direct response to precipitation.

A spring-fed intermittent stream, or stretch of a stream, flows only at certain times when it receives water from springs. The intermittent character of streams of this type is generally caused by fluctuations of the water table, whereby the stream channels stand part of the time below and part of the time above the water table. This is the ordinary type of intermittent stream.

A surface-fed intermittent

stream, or stretch of a stream, flows during protracted periods when it receives water from some surface source, generally the gradual and long-continued melting of snow in a mountainous or other cold tributary area. The term may be arbitrarily restricted to streams or stretches of streams that flow continuously during periods of at least 1 month.

An ephemeral stream, or stretch of a stream, flows only in direct response to precipitation. It receives no water from springs and no long-continued supply from melting snow or other surface source. Its stream channel is at all times above the water table. The term may be arbitrarily restricted to streams or stretches of streams that do not flow continuously for as long as 1 month.

With respect to continuity in space, streams may be divided into continuous and interrupted streams. An interrupted stream contains (1) perennial stretches with intervening, intermittent, or ephemeral stretches or (2) intermittent stretches with intervening ephemeral stretches. These two classes of interrupted streams are designated, respectively, perennial interrupted streams and intermittent interrupted streams. A continuous stream does not have interruptions in space. It may be perennial, intermittent, or ephemeral, but it does not habitually have wet and dry stretches.

INSTRUMENTATION describes the type of runoff control or measuring device, number and type of precipitation gages, type of charts used, and snow courses, if employed.

WATERSHED CONDITIONS describe the general use and farm, forest, or range practices before the period of record and the conservation measures, crops, yields, and general cultural operations and practices during the period of record. Rotation crops are listed in the order grown. Operations are described with commonly used agricultural terms, and only those that appear to have a sig-

nificant relationship to the hydrology of the watershed are mentioned.

GENERALLY REPRESENTS gives the broad area of application for which the data of the specific watershed are recommended. The land resource areas named are those delineated on the map titled "Location of Experimental Agricultural Watersheds of the Science and Education Administration-Agricultural Research," on pages 26 and 27. Solid circles show the approximate locations of the continuing or new watersheds; open circles show approximate locations of the discontinued studies. For a few studies the circles indicate the locations of the project headquarters instead of the watershed locations. A larger index map with more detail is included in reference 4.

For some studies there is an apparent contradiction between the watershed location on the maps and the descriptive information under Generally Represents. This is caused by the small scale of maps; it is difficult to show many small local variations in boundaries of the land resources areas. The descriptive statements, instead of the map location, should be the guide to the application of the data.

#### STANDARD SYMBOLS FOR TABULAR DATA

The following capital letters have been used as standard symbols throughout this publication to designate specific items or meanings:

<u>Symbol</u>	<u>Meaning</u>
E	value is estimated or partially estimated.
H	precipitation in form of hail.
L	precipitation in form of sleet or freezing rain.
M	mixed precipitation in form of rain, snow, and sleet.

N	precipitation in form of rain and snow.
NR	when used in place of value, "no record."
P	monthly or annual precipitation in inches.
Q	monthly or annual runoff in inches.
RG	rain gage, generally followed by gage number.
S	precipitation in form of snow.
STA AV (or AVG)	station average for period of record.
T	trace, indicates that the value is not large enough to round to the lowest significant digit. In some arrays a trace value is indicated by all zeros, with more than one zero located to the right of the decimal.

Time-of-day symbols or designations a, p, m, and n used in previous publications through 1961 have been discontinued, and military time (0001 through 2400) has been substituted in publications since then. Unless stated otherwise, time used in tables is eastern, central, mountain, or Pacific standard, whichever applies to the given location.

#### PERSONNEL RESPONSIBLE FOR DATA PREPARATION

At each research location many individuals have contributed to the planning and establishment of the watershed and the collection, compilation, and analysis of the data. Some of those who were directly responsible for preparing the data and information for this report are--

<u>Name</u>	<u>Location</u>
R. B. Slack.....	08
A. P. Barnett.....	10
J. C. Carr, V. O. Shanholtz.....	13
R. M. Weaver.....	16
L. A. Kramer, M. Mazzocco.....	25, 21
C. A. Salrin.....	26

W. O. Ree, W. R. Gwinn, F. L.	
Wimberly.....	37
C. W. Richardson, D. A. Wright.....	42, 70
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### ADDITIONAL PUBLICATIONS BY LOCATION

In references 1 and 4-14 (see pp. 2 and 3), citations to other publications, which present watershed data and interpretations of results in various journals, bulletins, and periodicals, are given at the end of the introduction for many of the locations. Following is a listing, by location number, of additional publications that have resulted from related work through 1971. Several publications pertaining to the overall program of hydrology that could not be tied to a specific location are listed at the end under General References.

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UNITED STATES INDEX MAP AND RELATED DATA

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[Pages 26 through 28]

**333-603**

# LOCATION OF EXPERIMENTAL AGRICULTURAL WATERSHEDS OF THE SCIENCE & EDUCATION ADMINISTRATION, AGRICULTURAL RESEARCH (1971)

BY  
LAND RESOURCE REGIONS  
MAJOR LAND RESOURCE AREAS  
OF THE  
UNITED STATES  
(48 CONFORMING STATES)

KEY TO RESEARCH LOCATIONS  
Current (continuing studies)  
Discontinued locations

37  
33



# LEGEND FOR LAND RESOURCE REGIONS AND MAJOR LAND RESOURCE AREAS (of the 48 continental States)

## **A** NORTHWESTERN FOREST, FORAGE, AND SPECIALTY CROP REGION (of the 48 continental States)

- 1 Northern Pacific Coast Range and Valleys
- 2 Willamette and Puget Sound Valleys
- 3 Cascade Range and Valleys
- 4 California Coastal Redwood Belt
- 5 Skyway-Trinity Area

## **B** NORTHWESTERN WHEAT AND RAINCROPS REGION

- 6 Eastern Slope Cascade Mountains
- 7 Columbia Basin
- 8 Columbia Plateau
- 9 Snake River Plateaus
- 10 Upper Snake River Lava Flats and Hills
- 11 Snake River Plains
- 12 Snake River Plateaus
- 13 Eastern Idaho Plateaus

## **C** CALIFORNIA SUBTROPICAL FRUIT, TRUCK, AND SPECIALTY CROP REGION

- 14 Central California Valleys
- 15 Central California Coast Range
- 16 California Delta
- 17 Sacramento and San Joaquin Valleys
- 18 Central Valley
- 19 Southern California Coastal Plain
- 20 Southern California Mountains

## **D** WESTERN RANGE AND BRIGATED REGION

- 21 Western Nevada Valleys and Basins
- 22 Sierra Nevada Range
- 23 Malheur High Plateau
- 24 Humboldt Plateau
- 25 Snake River Plateau
- 26 Carson Basin and Mountains
- 27 Fallon-Lovelock Area
- 28 Southern Nevada Basin and Range
- 29 Sonoran Basin and Range
- 30 Sonoran Desert
- 31 Sonoran Desert
- 32 Northern Intermountain Desertic Basins
- 33 Semiarid Rocky Mountains
- 34 (See E Below)

- 35 Colorado and Green River Plateaus
- 36 Grand and Teton Mountains
- 37 San Juan River Valley, Mesa, and Plateaus
- 38 Black, Hualapai, and Central Mountains
- 39 Grand Canyon Plateau
- 40 Central Arizona Basin and Range
- 41 Subdesert Arizona Basin and Range
- 42 Southern Desertic Basins, Plains and Mountains

## **E** ROCKY MOUNTAIN RANGE AND FOREST REGION

- 43 Northern Rocky Mountains
- 44 Northern Rocky Mountain Valleys
- 45 Northern Rocky Mountain Plateaus
- 46 Northern Rocky Mountain Foothills
- 47 Snake and Uinta Mountains
- 48 Northern Rocky Mountain Foothills
- 49 Southern Rocky Mountain Foothills
- 50 San Luis Valley

## **F** NORTHERN GREAT PLAINS SPRING WHEAT REGION

- 52 Brown Glaciated Plain
- 53 Dark Brown Glaciated Plain
- 54 Dark Brown Glaciated Plain
- 55 Black Glaciated Plain
- 56 Red River Valley of the North
- 57 Western Minnesota Forest Prairie Transition

## **G** WESTERN GREAT PLAINS RANGE AND BRIGATED REGION

- 58 Northern Rolling High Plains
- 59 Northern Smooth High Plains
- 60 Northern Smooth High Plains
- 61 Black Hills Foothills
- 62 Black Hills
- 63 Northern Slope Plateaus
- 64 Mixed Sandy and Silty Tableland
- 65 Nebraska Sand Hills
- 66 Nebraska Sand Hills
- 67 Central High Plains
- 68 Irrigated Upper Plateau River Valley
- 69 Upper Plateau River Valley
- 70 Pecos-Caudan Plains and Valleys

## **H** CENTRAL GREAT PLAINS WINTER WHEAT AND RANGE REGION

- 71 Central Nebraska Loess Hills
- 72 Central Nebraska Loess Hills
- 73 Rolling Plains and Breaks
- 74 Central Kansas Sandstone Hills
- 75 Central Kansas Sandstone Hills
- 76 Bluestem Hills
- 77 Southern High Plains
- 78 Southern High Plains
- 79 Central Bend Sand Plains
- 80 Central Rolling Red Prairies

## **I** SOUTHWESTERN PLATEAUS AND PLAINS, RANGE AND COTTON REGION

- 81 Edwards Plateau
- 82 Texas Central Basin
- 83 Rio Grande Plain

## **J** SOUTHWESTERN PRAIRIES, COTTON, AND FORAGE REGION

- 84 Cross Timbers
- 85 Cross Timbers
- 86 Cross Timbers
- 87 Texas Claypan Area
- 88 Texas Claypan Area

## **K** NORTHERN LAKE STATES FOREST AND FORAGE REGION

- 89 Minnesota Rockland Hills
- 90 Minnesota Rockland Hills
- 91 Wisconsin and Minnesota Sandy Outwash
- 92 Superior Lake Plain
- 93 Superior Lake Plain
- 94 Northern Michigan Sand Drift

## **L** LAKE STATES FRUIT, TRUCK, AND DAIRY REGION

- 95 Southeastern Wisconsin Drift Plain
- 96 Southeastern Wisconsin Drift Plain
- 97 Southeastern Michigan Fruit and Truck Belt
- 98 Southeastern Michigan Drift Plain
- 99 Southeastern Michigan Drift Plain
- 100 Erie Fruit and Truck Area
- 101 Ontario-Michigan Plain

## **M** CENTRAL FEED GRAINS AND LIVESTOCK REGION

- 102 Loess, Till, and Sandy Prairies
- 103 Loess, Till, and Sandy Prairies
- 104 Loess, Till, and Sandy Prairies
- 105 Eastern Iowa and Minnesota Till Prairies

## **N** EAST AND CENTRAL GENERAL FARMING AND FOREST REGION

- 106 Northern Mississippi Valley, Loess Hills
- 107 Iowa and Missouri, Deep Loess Hills
- 108 Illinois and Iowa, Deep Loess Hills
- 109 Illinois and Iowa, Deep Loess Hills
- 110 Northern Illinois and Indiana Heavy Till Plain
- 111 Indiana and Ohio Till Plain
- 112 Central Claypan Areas
- 113 Southern Illinois and Indiana
- 114 Southern Illinois and Indiana, Thin Loess and Till Plain
- 115 Southern Illinois and Indiana, Thin Loess and Till Plain

## **O** MISSISSIPPI DELTA COTTON AND FEED GRAINS REGION

- 116 Oriskany Highlands
- 117 Oriskany Highlands
- 118 Arkansas Valley and Ridge
- 119 Ouachita Mountains
- 120 Ouachita Mountains
- 121 Kentucky Bluegrass
- 122 Highland Rim and Kentucky
- 123 Western Allegheny Plateau
- 124 Western Allegheny Plateau
- 125 Cumberland Plateau and Mountains
- 126 Cumberland Plateau and Mountains
- 127 Eastern Allegheny Plateau and Mountains
- 128 Southern Appalachian Ridges and Valleys
- 129 Southern Appalachian Ridges and Valleys
- 130 Blue Ridge

## **P** SOUTH ATLANTIC AND GULF SLOPE CASH CROP, FOREST, AND LIVESTOCK REGION

- 131 Southern Mississippi Valley Alluvium
- 132 Eastern Alabama Prairies
- 133 Eastern Alabama Prairies
- 134 Southern Mississippi Valley Silty Uplands
- 135 Alabama and Mississippi Blackland Prairies
- 136 Alabama and Mississippi Blackland Prairies
- 137 Carolina and Georgia Sandhills
- 138 North Central Florida Ridge

## **R** NORTHEASTERN FORAGE AND FOREST REGION

- 139 Eastern Ohio Till Plain
- 140 Glaciated Allegheny Plateau and Catskill Mountains
- 141 Tuglihi Plateau
- 142 Tuglihi Plateau
- 143 Northeastern Mountains
- 144 New England and Eastern New York Upland
- 145 New England and Eastern New York Upland
- 146 Adirondack Area

## **S** NORTHERN ATLANTIC SLOPE, TRUCK, FRUIT, AND POULTRY REGION

- 147 Northern Appalachian Ridges and Valleys
- 148 Northern Piedmont
- 149 Northern Piedmont
- 150 Northern Piedmont
- 151 Gulf Coast Prairies
- 152 Gulf Coast Marsh
- 153 Atlantic Coast Plateaus
- 154 Atlantic Coast Plateaus

## **T** ATLANTIC AND GULF COAST LOWLANDS, FOREST AND TRUCK CROP REGION

- 155 South Central Florida Ridge
- 156 Southern Florida Plateaus
- 157 Florida, Everglades and Associated Areas

## **U** FLORIDA SUBTROPICAL FRUIT, TRUCK CROP, AND RANGE REGION

- 158 South Central Florida Ridge
- 159 Southern Florida Plateaus
- 160 Florida, Everglades and Associated Areas

Information from SCS State and other Offices

Table 3.--Experimental agricultural watersheds, listed by State, locality, and location number, under study during 1971 and included in this publication

State	Locality	Assigned location number	Major land resource area <sup>1/</sup>	Watershed units	Events reported	Pages
Arizona.....	Tombstone.....	63	D-41	8	14	238-272
Florida.....	Vero Beach.....	08	U-55	2/3	0	30-42
Georgia.....	Watkinsville.....	10	P-136	1	2	43-46
Idaho.....	Reynolds.....	68	D-23, D-25	8	6	310-340
Iowa.....	Treynor.....	71	M-107	5	5	469-490
Mississippi....	Oxford.....	62	P-133, P-134	12	12	194-237
Missouri.....	McCredie.....	25	M-113	1	0	67-68
New Mexico.....	Santa Rosa.....	64	G-70	1	1	273-275
North Carolina	Ahoskie.....	75	P-133	4	4	497-509
Ohio.....	Coshooton.....	26	N-124	3/10	9	69-98
Oklahoma.....	Chickasha.....	69	H-78, H-80, J-84	4/33	17	341-426
	Stillwater.....	37	H-80	3	3	99-108
Pennsylvania...	Klingerstown.....	16	S-147	1	1	64-66
South Dakota...	Newell.....	65	G-58, G-59, G-60	7	0	276-289
	Cottonwood.....	72	G-60	3	0	491-496
Texas.....	Riesel (Waco).....	42	J-86	22	22	109-193
	Sonora.....	70	I-81	13	13	427-468
Vermont.....	North Danville.....	67	R-144	5	8	290-309
Virginia.....	Blacksburg.....	13	N-126, N-130, P-136, S-148	5	5	47-63

<sup>1/</sup> See location map (p. 26) and legend (p. 27).

<sup>2/</sup> Includes data for one new Watershed W-5 (08005), Vero Beach, Fla.

<sup>3/</sup> 9 watersheds (Coshooton, Ohio) included in the 1970 publication (reference No. 14) are not included in this publication. Records terminated during 1971, either temporary or permanent.

<sup>4/</sup> One watershed for Chickasha, Okla. (69006) included in the 1970 publication (reference #14) is not included in this publication. Records were terminated.

Table 4.-- Watersheds, listed by State and locality, for which data were previously included but are not in this publication<sup>1/</sup>

State	Locality	Major land resource area <sup>2/</sup>	Discontinued watershed units		
			Number	Record period (19--)	Assigned location and watershed number
Ohio.....	Coshooton.....	N-124	1	37-71	26.036
			1	38-72	26.005
			4	39-71	26.023,-031,-033,-034
			1	41-71	26.024
			1	40-71	26.032
			1	64-71	26.040
Oklahoma.....	Chickasha.....	H-80, H-78, J-78	1	63-71	69.006

<sup>1/</sup> For discontinued watershed studies prior to 1970, see tables in previous publications.

<sup>2/</sup> See location map (p. 26) and legend (p. 27).

**WATERSHED DATA BY LOCATION NUMBER  
AND  
DECIMAL PAGING**

**[8.002-1 TO 75.004-3, A TOTAL OF 480 DATA SHEETS]**

**For location by States and Land Resource Areas  
and Regions, see U.S. Index Map, page 26.**

VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2

LOCATION: Okeechobee County, Florida. Runoff gaging site is about 3 mi. N. of City of Okeechobee on Cemetery Road. Taylor Creek empties into Lake Okeechobee.

AREA: 66890.00 acres 104.50 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)				VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
P	0.09	3.53	1.25	0.20	5.50	11.67	6.91	6.78	5.85	5.13	0.77	0.72	48.82		
1971 Q	0.135	0.221	0.147	0.048	0.103	2.852	2.558	2.377	4.022	1.006	0.406	0.207	14.082		
STA AV P	1.93	2.80	3.14	1.91	4.86	8.72	6.47	6.66	6.35	4.40	1.25	1.51	49.50		
Q	0.531	0.480	1.185	0.194	0.378	2.274	2.103	2.145	2.756	2.153	2.115	0.219	16.493		

NOTES: Watershed conditions: 1971: Range C forest, 41%; improved pasture, 45%; cropland, 8%; miscellaneous, 10%. For revised map of watershed, see p. 08.002-3. Precipitation Thiessen weighted using 7 gauges. Area changed from 98.7 sq. miles (beginning of record to Dec. 31, 1966) to 104.5 sq. miles (Jan. 1, 1967). Precipitation and runoff records began July 1955. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1971 DAILY AIR TEMPERATURE (degrees F)													VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	64 37	75 45	88 60	77 65	90 73	88 60	90 73	89 73	88 73	93 71	89 71	82 62	2	75 56	73 54	86 67	80 62	91 56	89 67	93 74	91 70	88 72	94 72	79 68	78 69
3	78 59	79 47	88 39	76 63	89 49	89 69	89 71	94 72	88 72	93 69	89 64	73 54	4	89 67	79 56	62 37	74 63	83 42	88 70	92 70	91 73	90 73	92 69	78 63	68 53
5	82 61	84 64	75 46	82 61	87 51	90 63	90 72	88 69	90 73	91 72	80 67	78 67	6	84 63	81 65	82 64	78 47	90 58	85 69	88 72	91 71	88 72	93 70	84 64	83 66
7	71 63	89 72	76 38	67 40	95 59	89 67	89 72	95 75	87 72	92 69	86 63	86 60	8	84 63	77 38	64 37	77 44	93 67	90 68	88 75	94 74	86 72	90 71	83 62	88 63
9	86 61	56 33	70 45	79 47	94 66	91 65	88 74	90 70	78 70	91 75	81 61	85 61	10	85 62	57 39	80 55	81 53	96 65	90 68	89 73	89 69	83 71	85 64	74 50	86 59
11	78 50	69 45	83 56	78 56	95 69	92 67	89 72	90 74	89 74	76 77	77 48	83 56	12	82 54	79 57	85 60	81 46	93 69	90 69	93 71	87 73	87 71	88 70	80 52	84 57
13	81 51	68 35	85 67	84 47	92 68	91 72	95 74	77 73	88 74	88 70	80 57	84 59	14	83 49	61 29	88 62	86 59	89 69	95 75	93 73	85 75	85 69	90 71	80 61	80 60
15	81 46	73 61	91 65	85 57	86 70	95 72	92 74	85 76	90 69	93 70	81 66	84 62	16	67 38	75 43	82 50	86 51	89 67	94 69	93 73	91 72	90 70	91 70	83 58	86 68
17	65 43	83 53	77 43	88 68	88 62	95 72	94 72	93 73	89 71	86 65	73 52	79 66	18	74 50	78 58	76 55	88 59	87 58	95 71	95 75	90 75	93 70	83 68	83 58	71 55
19	61 26	81 55	84 53	91 56	89 58	92 73	93 74	88 75	93 69	85 67	84 57	76 62	20	52 27	83 55	68 33	88 60	91 65	93 72	94 72	91 75	90 68	85 68	83 56	83 62
21	70 48	86 69	73 50	91 63	89 62	95 71	93 72	91 74	90 70	86 68	74 46	84 67	22	75 57	88 60	81 48	92 62	88 59	92 72	92 72	93 73	89 71	86 65	73 52	79 66
23	82 59	76 54	84 62	94 72	85 61	89 73	91 70	95 72	88 72	89 66	79 62	76 63	24	85 60	81 58	82 56	91 73	87 66	91 72	90 71	93 73	90 72	90 64	85 59	79 57
25	84 61	86 62	86 63	91 64	89 65	91 70	93 71	91 74	90 69	85 61	74 49	80 55	26	83 43	87 69	86 42	93 71	91 63	90 72	93 72	93 73	89 68	83 60	78 55	82 53
27	70 29	87 63	72 43	92 68	91 62	93 72	92 74	94 74	89 69	85 63	82 53	85 58	28	69 33	87 62	80 50	96 63	92 66	89 71	90 72	92 74	90 69	84 65	81 69	84 55
29	75 37		83 55	95 67	90 59	89 72	89 73	91 74	89 67	84 65	78 65	83 56	30	82 57		70 41	97 72	87 57	89 71	90 73	89 73	92 70	87 68	82 57	82 52
31	83 58		75 46		89 59								AV.	77 51	78 53	79 51	85 59	90 62	91 70	91 73	90 73	89 71	88 68	81 59	81 60
NRAN	63.9	65.5	65.4	72.3	75.9	80.4	82.0	81.7	79.8	78.3	69.9	70.5	STA AV	70 49	74 50	77 55	83 61	88 66	89 71	92 74	92 74	91 73	87 66	79 56	74 52

NOTES: Temperature data from R-3, readings taken daily. STA AV period from July 1, 1956 through 1971.

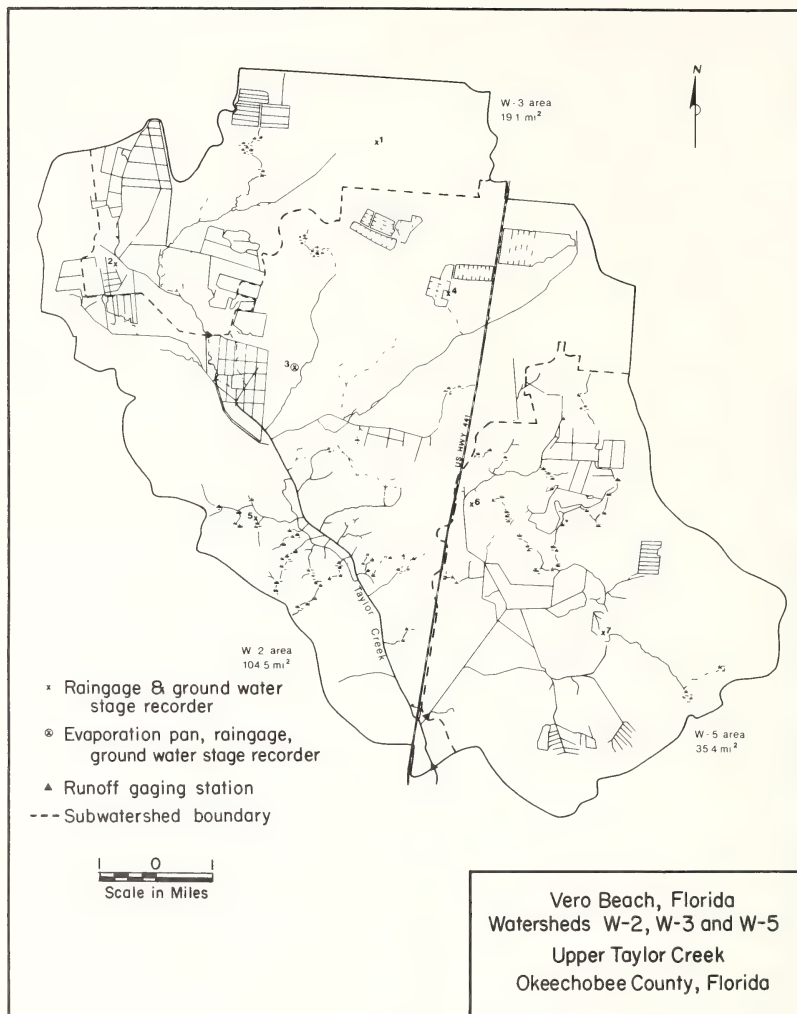
Cooperative Research Project of USDA, Florida Agricultural Experiment Station, U.S. Geological Survey and the Central and Southern Florida Flood Control District

1971 DAILY PRECIPITATION (inches)												VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.00	0.39	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.08	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.00	0.0	0.03	0.02	0.0	0.12	0.0	0.02	0.57											
4	0.0	0.0	0.0	0.17	0.0	0.01	0.27	1.02	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.03	0.0	0.0	0.32	0.22	0.14	0.37	0.54	0.0											
6	0.0	0.62	0.0	0.0	0.0	0.02	0.41	0.0	0.90	0.07	0.0	0.0											
7	0.0	0.0	0.31	0.0	0.0	0.06	0.02	0.0	0.01	0.68	0.0	0.0											
8	0.0	0.61	0.0	0.0	0.0	1.21	0.24	0.0	0.83	0.40	0.02	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.97	1.37	0.03	0.34	0.62	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.61	0.01	0.22	0.05	0.51	0.06	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.66	2.19	0.0	0.05	0.15	0.19	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.02	1.75	0.22	0.0	0.0											
13	0.0	0.0	0.14	0.0	0.0	0.19	0.12	0.0	0.52	0.00	0.0	0.0											
14	0.0	0.0	0.13	0.0	0.0	0.71	0.0	0.21	0.34	0.11	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	1.99	0.0	0.09	0.21	0.0	0.05	0.0											
16	0.0	0.0	0.13	0.0	0.0	0.46	0.02	0.15	0.18	0.0	0.12	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.01	2.39	0.28	0.0	0.05	0.46	0.0											
18	0.03	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.31	0.01	0.23	0.0											
19	0.06	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.66	0.0	0.15	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.14	0.0	0.01	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.05	0.01	0.0	0.0	0.0											
22	0.0	0.03	0.0	0.0	0.0	0.0	0.36	0.51	0.0	0.03	0.18	0.0											
23	0.0	2.16	0.0	0.0	0.0	0.0	0.37	0.30	0.16	0.09	0.00	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.04	0.0	0.0	0.0											
25	0.0	0.10	0.0	0.12	0.0	0.89	0.0	0.32	0.01	0.0	0.0	0.0											
26	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.02	0.0	0.0	0.17	0.20	0.00	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	1.45	0.54	0.32	0.02	0.01	0.29	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.07	1.25	0.01	0.01	0.05	0.07											
30	0.0	0.32	0.0	0.0	0.0	0.0	0.05	0.01	0.53	0.01	0.11	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.42	0.0	0.0											
TOTAL	0.09	2.53	1.25	0.39	5.50	11.67	6.91	6.78	5.85	5.19	0.78	1.63											
STA AV	1.93	2.49	3.34	1.91	4.46	8.72	6.47	6.66	6.35	4.40	1.25	1.51											

NOTES: Thiessen weighted rainfall, using 7 rain gages. STA AV based on period July 1, 1955 through 1971.

1971 MEAN DAILY DISCHARGE (cfs)												VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	13.0	10.0	21.0	6.7	1.9	8.6	180.0	229.0	231.0	22.0	60.0	18.0											
2	14.0	11.0	20.0	6.1	1.9	6.9	209.0	129.0	481.0	20.0	53.0	15.0											
3	14.0	12.0	17.0	6.1	1.7	6.4	134.0	78.0	912.0	18.0	51.0	18.0											
4	13.0	12.0	16.0	6.7	1.7	6.2	83.0	75.0	564.0	18.0	42.0	23.0											
5	18.0	12.0	16.0	7.05	1.7	5.8	92.0	271.0	597.0	18.0	41.0	21.0											
6	12.0	14.0	18.0	7.3	1.9	4.3	95.0	253.0	622.0	20.0	158.0	20.0											
7	12.0	16.0	18.0	6.1	1.9	5.2	200.0	148.0	814.0	22.0	117.0	19.0											
8	13.0	20.0	20.0	5.4	1.9	7.9	176.0	93.0	497.0	60.0	75.0	19.0											
9	13.0	19.0	15.0	4.9	1.9	23.0	285.0	76.0	344.0	53.0	50.0	18.0											
10	13.0	15.0	13.0	4.6	1.9	88.0	1060.0	50.0	477.0	176.0	38.0	18.0											
11	13.0	13.0	13.0	4.1	1.9	85.0	580.0	50.0	289.0	272.0	31.0	18.0											
12	12.0	12.0	12.0	4.0	1.9	574.0	287.0	47.0	465.0	284.0	31.0	17.0											
13	12.0	12.0	11.0	4.3	1.7	563.0	161.0	74.0	885.0	277.0	29.0	17.0											
14	12.0	12.0	12.0	4.3	3.9	401.0	100.0	291.0	761.0	134.0	22.0	18.0											
15	11.0	12.0	13.0	4.6	10.0	126.0	111.0	335.0	940.0	91.0	20.0	17.0											
16	10.0	12.0	13.0	5.0	83.0	68.0	101.0	271.0	586.0	74.0	19.0	16.0											
17	10.0	14.0	15.0	5.5	40.0	82.0	131.0	286.0	336.0	67.0	19.0	16.0											
18	11.0	15.0	11.0	5.5	20.0	854.0	141.0	231.0	244.0	105.0	19.0	15.0											
19	11.0	15.0	10.0	4.6	12.0	906.0	106.0	377.0	172.0	153.0	19.0	14.0											
20	9.5	13.0	8.7	3.9	11.0	563.0	73.0	531.0	103.0	129.0	18.0	14.0											
21	8.9	13.0	7.3	3.2	8.1	199.0	115.0	370.0	107.0	117.0	17.0	14.0											
22	9.8	14.0	7.9	2.7	7.5	131.0	83.0	242.0	74.0	99.0	20.0	15.0											
23	11.0	81.0	8.7	2.3	5.8	157.0	184.0	157.0	41.0	81.0	16.0	25.0											
24	11.0	94.0	9.6	1.9	4.3	338.0	261.0	147.0	52.0	66.0	16.0	26.0											
25	10.0	38.0	9.6	1.8	4.3	447.0	169.0	203.0	46.0	56.0	16.0	21.0											
26	13.0	33.0	9.2	1.7	6.0	764.0	96.0	262.0	39.0	39.0	15.0	18.0											
27	11.0	24.0	11.0	1.7	5.0	478.0	108.0	188.0	34.0	36.0	17.0	17.0											
28	8.7	19.0	9.4	1.7	9.5	235.0	130.0	281.0	32.0	36.0	15.0	19.0											
29	9.0	1.9	1.9	1.9	3.0	245.0	120.0	154.0	27.0	42.0	16.0	18.0											
30	9.7	9.0	1.7	2.2	191.0	75.0	191.0	144.0	23.0	42.0	18.0	15.0											
31	10.0		8.2		12.0		436.0	265.0		43.0													
MEAN	11.57	20.96	12.59	4.27	8.79	252.31	219.03	203.48	355.83	86.10	35.93	17.71											
INCHES	0.135	0.221	0.147	0.048	0.103	2.852	2.377	4.022	1.006	0.406	0.207	0.207											
STA AV	0.531	0.486	1.145	0.194	0.378	2.274	2.103	2.145	2.756	2.153	2.115	0.219											

NOTES: To convert mean daily discharge in CFS to TMD/DAV, multiply by .00035589. Discharge is combined flow from Williamson ditch and S-1 structure. Runoff data furnished by the U.S. Geological Survey. Discharge measurements generally made once a week.



## VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3

LOCATION: Okeechobee County, Florida. Runoff gaging site is approximately 11 mi. (airline) N-W of City of Okeechobee on State Road #68. Northern reach of Taylor Creek Watershed.

AREA: 12224.00 acres 19.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3								
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
	P	0.05	5.19	1.17	0.67	5.59	10.75	6.72	7.33	5.27	7.08	0.36	1.33	51.51
1971	Q	0.067	0.295	0.165	0.044	0.055	2.815	1.731	3.872	4.422	2.116	0.505	0.237	16.321
STA AV	P	1.81	2.48	3.31	2.24	4.46	7.85	6.74	6.56	5.91	4.34	1.12	1.45	48.28
	Q	0.473	0.345	1.073	0.179	0.276	1.687	1.881	2.112	2.638	1.915	1.188	0.151	13.917

NOTES: Watershed conditions: 1971: Improved pasture, 55%; range & forest, 30%; cropland, 15%; miscellaneous, 10%. For revised map of watershed, see p. 08.002-3. Area changed from 15.7 sq. miles (beginning of record to Dec. 31, 1966) to 19.1 sq. miles (Jan. 1, 1967). Precipitation and runoff records began July 1955. Precipitation Thiessen weighted using 3 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1971 DAILY PRECIPITATION (Inches)						VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.02	0.0	0.20	0.02	0.29	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.06	0.0
3	0.0	0.0	0.0	0.00	0.0	0.04	0.07	0.0	0.0	0.0	0.02	0.73
4	0.0	0.0	0.0	0.22	0.0	0.03	0.19	1.54	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.00	0.0	0.0	0.14	0.31	0.03	0.41	0.02	0.0
6	0.0	0.05	0.0	0.0	0.0	0.0	0.64	0.0	1.10	0.01	0.0	0.0
7	0.0	0.0	0.20	0.0	0.0	0.13	0.0	0.0	0.00	1.32	0.0	0.0
8	0.0	0.79	0.0	0.0	0.0	2.15	0.33	0.0	0.01	0.05	0.04	0.0
9	0.0	0.0	0.0	0.0	0.0	0.40	0.72	0.03	0.29	0.85	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.83	0.03	0.48	0.07	0.60	0.12	0.0
11	0.0	0.0	0.0	0.0	0.25	2.55	0.0	0.18	0.0	0.23	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.01	1.36	0.46	0.0	0.0
13	0.0	0.04	0.10	0.0	0.12	0.0	0.0	1.03	0.89	0.00	0.0	0.0
14	0.0	0.0	0.06	0.0	0.28	0.0	0.11	0.37	0.17	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	2.15	0.0	0.01	0.25	0.0	0.15	0.0	0.0
16	0.0	0.0	0.12	0.0	0.51	0.00	0.27	0.50	0.0	0.00	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	1.61	0.75	0.0	0.19	0.93	0.0	0.0
18	0.02	0.0	0.0	0.0	0.0	0.11	0.0	0.08	0.06	0.40	0.0	0.0
19	0.03	0.0	0.0	0.0	0.0	0.12	0.0	0.59	0.0	0.21	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.31	0.0	0.02	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.35	0.00	0.04	0.0	0.0	0.0	0.0
22	0.0	0.00	0.0	0.0	0.0	0.14	0.27	0.0	0.0	0.06	0.0	0.31
23	0.0	4.25	0.0	0.0	0.0	0.02	0.33	0.0	0.11	0.00	0.02	0.06
24	0.0	0.0	0.0	0.00	0.0	0.05	0.0	0.59	0.04	0.0	0.0	0.22
25	0.0	0.06	0.0	0.39	0.0	1.43	0.0	0.08	0.0	0.0	0.0	0.0
26	0.0	0.0	0.21	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.06	0.0	0.0	0.52	0.02	0.01	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	2.28	0.13	0.06	0.08	0.01	0.12	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.03	1.41	0.01	0.01	0.07	0.10	0.0
30	0.0	0.49	0.0	0.0	0.0	0.11	0.03	0.55	0.0	0.13	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	1.04	0.0	0.0	0.0
TOTAL	0.05	5.19	1.17	0.67	5.59	10.75	6.72	7.33	5.27	7.08	0.36	1.33
STA AV	1.81	2.48	3.31	2.24	4.46	7.85	6.74	6.56	5.91	4.34	1.12	1.45

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-2, p. 08.002-1. Thiessen weighted average of 3 rain gages. STA AV based on period July 1, 1955 through 1971.

1971		MEAN DAILY DISCHARGE (cfs)					VERO BRANCH, FLORIDA (TAYLOR CREEK)				WATERSHED R-3		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.70	0.90	3.80	1.40	0.0	0.70	19.00	57.00	33.00	7.80	13.00	3.40	
2	0.70	2.80	3.60	1.20	0.0	0.60	19.00	38.00	69.00	7.20	19.00	3.60	
3	0.70	1.80	3.60	1.00	0.0	0.60	11.00	25.00	111.00	6.70	16.00	4.80	
4	0.60	1.80	3.00	1.20	0.0	0.50	9.00	18.00	60.00	6.50	14.00	7.90	
5	0.60	1.60	2.80	1.60	0.0	0.30	9.00	54.00	42.00	4.60	12.00	4.80	
6	0.60	1.80	3.00	1.00	0.0	0.30	13.00	69.00	48.00	7.50	11.00	4.10	
7	1.00	1.80	3.20	0.80	0.0	0.20	25.00	51.00	118.00	12.00	9.30	3.40	
8	0.50	2.40	3.00	0.60	0.0	0.30	17.00	37.00	67.00	18.00	8.20	3.20	
9	0.80	3.00	2.80	0.60	0.0	10.00	25.00	29.00	51.00	19.00	7.50	3.00	
10	0.30	2.20	2.60	0.60	0.0	5.90	46.00	23.00	53.00	68.00	7.20	3.00	
11	0.80	1.80	2.80	0.60	0.0	68.00	26.00	20.00	44.00	93.00	7.00	2.80	
12	0.50	1.80	2.60	0.60	0.0	186.00	17.00	18.00	57.00	121.00	5.90	2.80	
13	0.60	1.80	2.60	0.80	0.0	113.00	12.00	24.00	285.00	114.00	5.40	2.80	
14	0.80	1.60	2.60	0.60	0.0	44.00	9.00	53.00	291.00	50.00	5.10	4.10	
15	0.80	1.80	2.40	0.60	2.40	24.00	8.00	70.00	134.00	30.00	5.40	3.40	
16	0.80	1.80	2.60	0.60	6.60	15.00	10.00	78.00	86.00	25.00	5.80	3.20	
17	1.00	1.80	2.80	0.40	3.00	81.00	22.00	96.00	60.00	20.00	5.40	2.60	
18	1.80	2.20	1.80	0.40	1.20	153.00	31.00	66.00	50.00	30.00	5.60	2.00	
19	1.80	2.20	1.80	0.30	0.80	43.00	14.00	81.00	46.00	47.00	5.40	3.00	
20	1.40	2.20	1.60	0.30	0.60	25.00	13.00	106.00	38.00	40.00	4.80	2.80	
21	1.40	2.00	1.40	0.30	0.60	17.00	18.00	93.00	30.00	33.00	4.80	3.00	
22	1.40	2.00	1.60	0.40	0.50	18.00	11.00	80.00	24.00	25.00	4.30	2.80	
23	1.40	36.00	1.60	0.40	0.40	17.00	15.00	59.00	20.00	20.00	3.80	3.40	
24	1.40	22.00	1.60	0.30	0.60	13.00	35.00	44.00	18.00	16.00	3.60	3.40	
25	1.40	7.20	1.20	0.40	0.20	62.00	18.00	98.00	16.00	12.00	3.40	3.00	
26	1.40	5.40	1.20	0.50	0.10	162.00	13.00	82.00	14.00	7.30	4.60	2.40	
27	1.20	4.60	1.20	0.40	0.10	59.00	12.00	48.00	12.00	12.00	4.10	2.40	
28	0.50	4.10	1.00	0.20	0.20	31.00	12.00	36.00	11.00	9.70	3.80	2.40	
29	0.60		0.80	0.20	3.00	25.00	40.00	29.00	10.00	10.00	4.10	2.40	
30	0.60		1.40	0.10	1.80	17.00	116.00	25.00	9.00	10.00	3.60	2.20	
31	0.60		2.00		1.00		86.00	28.00		11.00		1.80	
MEAN	0.913	4.443	2.245	0.613	0.785	39.613	23.581	52.742	62.233	28.816	7.107	3.223	
INCHES	0.067	0.295	0.165	0.048	0.055	2.815	1.731	3.872	4.422	2.116	0.505	0.237	
STA AV	0.473	0.385	1.073	0.179	0.276	1.687	1.881	2.112	2.638	1.915	1.188	0.151	

NOTES: To convert mean daily discharge in CFS to IS/DAY, multiply by .00194712. Runoff data furnished by U.S. Geological Survey.

## VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5

LOCATION: Okeechobee County, Florida; 125 feet upstream from control structure 7, 450 feet upstream from confluence with Taylor Creek, 3.6 miles north of town of Okeechobee, Florida.

AREA: 22656.00 acres 35.40 sq. miles

SLOPES: Slope-Percent 0-2  
Percent of area 100.0

SOILS: Predominantly fine sand surface which is very friable and has above average infiltration rates and little surface runoff until it becomes saturated. Generally underlain at varying depths by organic hardpan or clay or marl layers of variable thickness and hardness.

EROSION: Erosion Class + 1 2 3 4 5  
Percent of Area 0.0 100.0 0.0 0.0 0.0 0.0

LAND CAPABILITY: Class I II III IV V VI VII VIII  
Percent of Area 0.0 3.0 5.0 86.0 0.0 0.0 0.0 0.0

GEOLOGY: See Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 08-2-1.

SURFACE DRAINAGE: Fair to poor.

CHARACTER OF FLOW: Perennial flow.

INSTRUMENTATION: Daily stage and runoff data provided by U.S. Geological Survey. Precipitation: Two recording rain gages.

WATERSHED CONDITIONS: Vegetative Cover: Improved pasture - 60 percent; unimproved pasture and range with little timber - 15 percent; woodland - 10 percent; citrus - 5 percent; urban, roads, etc. - 5 percent.

GENERALLY REPRESENTS: Southern Florida Flatwoods land resource area (U-155).

MONTHLY PRECIPITATION AND RUNOFF (inches)						VERO BEACH, FLORIDA (WILLIAMSON DITCH)						WATERSHED W-5		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1965	P	0.37	3.62	3.49	0.83	0.93	7.30	6.37	3.00	4.63	5.18	0.56	0.76	37.04
	Q	0.117	0.243	0.256	0.131	0.061	0.264	0.302	0.236	0.154	0.441	0.289	0.120	2.614
1966	P	6.48	3.19	1.06	2.84	5.09	12.98	8.18	10.80	4.50	5.90	0.37	0.56	61.94
	Q	1.137	0.928	0.319	0.243	0.834	2.958	4.449	8.460	1.502	2.325	0.199	0.150	23.507
1967	P	0.84	2.54	0.94	0.0	0.23	12.56	11.38	12.39	5.38	3.72	0.41	2.26	52.65
	Q	0.141	0.142	0.130	0.092	0.062	0.207	5.571	2.998	1.777	1.467	0.142	0.120	12.848
1968	P	1.10	1.85	0.75	0.44	5.46	18.04	7.74	3.50	7.69	5.73	2.04	0.08	54.41
	Q	0.146	0.152	0.114	0.080	0.114	9.522	4.904	0.422	2.712	3.587	0.718	0.165	22.637
1969	P	2.02	1.16	7.82	0.77	8.20	10.54	6.01	9.74	7.36	10.44	4.03	2.78	70.86
	Q	0.269	0.143	3.170	0.156	1.050	4.996	0.970	5.279	3.054	5.638	3.103	1.869	29.697
1970	P	4.68	2.93	7.17	0.23	5.20	7.69	8.13	7.81	4.84	5.56	0.07	0.45	54.76
	Q	3.073	1.152	3.806	0.332	0.291	1.324	3.508	2.438	0.392	1.975	0.266	0.122	18.679
1971	P	0.13	2.11	0.99	0.27	4.87	11.51	6.02	5.46	6.58	4.58	1.26	2.20	45.97
	Q	0.114	0.152	0.154	0.078	0.141	1.809	2.033	1.509	4.040	0.385	0.489	0.182	11.085
STA AV	P	2.23	2.49	2.17	0.77	4.28	11.52	7.69	7.53	5.85	5.87	1.25	1.30	53.95
	Q	0.714	0.416	1.135	0.159	0.365	3.012	3.105	3.049	1.947	2.260	0.744	0.390	17.295

NOTES: Watershed Conditions: Same as described in previous section under WATERSHED CONDITIONS. For map of watershed, see p. 08.002-3. Precipitation and runoff records began April 1964, part-year records not included in STA AV. Precipitation Thiessen weighted using 2 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 8, Florida (Gage discontinued Nov. 1971, afterwards use Okeechobee 959).

1965 DAILY PRECIPITATION (inches)												VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	1.18	0.0	0.0											
2	0.0	0.0	0.06	0.3	0.0	0.0	0.0	0.20	0.38	0.11	0.0	0.0											
3	0.0	0.0	0.08	0.0	0.0	0.0	0.05	0.35	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.33	0.0	0.0	0.0	0.72	0.19	0.0	0.0	0.0	0.0											
5	0.0	0.22	0.0	0.0	0.0	0.54	0.24	0.0	0.0	0.0	0.10	0.0											
6	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.21	0.26	0.22	0.0											
7	0.0	0.50	0.0	0.0	0.0	1.22	0.0	0.43	0.10	0.36	0.02	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.23	0.03	0.12	0.35	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.27	0.0	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.60	0.95	0.24	0.31	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.12	0.28	0.0	0.0	0.0	0.03	0.0	0.22											
14	0.0	0.0	0.58	0.0	0.0	0.17	0.07	0.22	0.0	1.01	0.0	0.0											
15	0.03	0.0	0.0	0.0	0.0	0.01	0.99	0.0	0.0	0.03	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.10	0.52	0.32	0.30	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.02	0.34	0.0	0.26	0.0	0.0	0.0											
18	0.0	0.13	0.0	0.0	0.0	2.61	0.03	0.0	0.03	0.0	0.0	0.0											
19	0.0	0.03	0.0	0.0	0.05	0.03	0.14	0.0	0.0	0.0	0.0	0.09											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.45											
21	0.0	0.06	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0											
22	0.05	0.12	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.85	0.0	0.0											
23	0.0	1.72	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.03	0.0											
24	0.0	0.13	0.0	0.41	0.32	0.0	0.0	0.04	0.0	0.0	0.0	0.0											
25	0.28	0.0	0.0	0.0	0.0	0.65	0.0	0.03	0.02	0.0	0.0	0.0											
26	0.0	0.0	1.45	0.23	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0											
27	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.27	0.34	0.0	0.08	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.06	0.13	0.0	0.03	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.97	0.05	1.57	0.41	0.08	0.0											
31	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.24	0.94	0.0	0.0	0.0											
TOTAL	0.37	3.62	3.49	0.83	0.93	7.30	6.37	3.00	4.63	5.18	0.56	0.76											
STA AV	0.37	3.62	3.49	0.83	0.93	7.30	6.37	3.00	4.63	5.18	0.56	0.76											

NOTES: For daily air temperatures in the vicinity (1965), see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 08-002-1. Precipitation values are Thiessen weighted averages of two gauges. STA AV based on 1 yr (1965) record period.

1966 DAILY PRECIPITATION (inches)												VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.56	0.62	0.64	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0											
3	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.10	0.08	0.0	0.0											
4	2.69	0.0	0.0	1.34	0.0	0.0	0.0	0.14	0.0	0.40	0.0	0.38											
5	0.70	0.0	0.20	0.09	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0											
6	0.02	0.0	0.0	0.0	0.09	0.94	0.05	0.12	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	2.76	1.24	0.07	0.65	0.79	2.49	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.03	2.04	0.0	0.79	0.09	0.08	0.0	0.0											
9	0.0	0.0	0.0	0.76	0.03	0.24	0.26	0.01	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.57	0.0	0.0	0.16	0.36	1.30	0.0	0.0	0.0											
11	0.63	0.0	0.0	0.0	1.11	0.0	0.36	1.11	0.38	0.0	0.0	0.0											
12	0.07	0.0	0.0	0.0	0.9	0.0	0.41	0.55	0.07	0.08	0.0	0.05											
13	0.0	0.06	0.04	0.0	0.0	0.0	0.98	0.17	0.03	0.58	0.0	0.0											
14	0.0	0.0	0.04	0.0	0.0	0.71	0.0	0.0	0.36	1.03	0.0	0.0											
15	0.0	0.02	0.02	0.0	0.0	0.92	0.50	0.36	0.13	0.0	0.03	0.0											
16	0.0	0.0	0.0	0.0	0.0	1.18	0.56	0.0	0.0	0.0	0.11	0.0											
17	0.0	0.0	0.07	0.0	0.08	0.0	0.0	0.0	0.11	0.0	0.0	0.07											
18	0.0	0.20	0.0	0.0	0.18	0.09	0.0	0.17	0.10	0.0	0.0	0.05											
19	0.02	0.76	0.0	0.0	0.0	0.43	0.0	0.0	0.26	0.0	0.0	0.0											
20	0.30	0.0	0.0	0.0	0.0	1.29	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.23	0.49	0.42	0.63	0.11	0.0	0.0	0.0											
22	0.81	0.43	0.0	0.0	0.18	0.04	0.75	0.0	0.0	1.15	0.0	0.0											
23	0.0	1.57	0.0	0.0	0.08	0.0	0.02	3.59	0.0	0.0	0.18	0.0											
24	0.0	0.0	0.0	0.0	0.01	0.0	0.43	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.04	0.0	0.0	0.0	0.0											
26	0.60	0.0	0.0	0.0	0.26	0.0	0.81	0.57	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.06	0.0	0.09	0.12	0.13	0.0	0.0	0.0											
28	0.01	0.15	0.0	0.0	0.0	0.07	0.95	0.0	0.24	0.0	0.0	0.0											
29	0.38	0.69	0.0	0.0	0.0	1.45	0.26	0.0	0.29	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.07	0.0	1.20	0.12	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.06	0.0	0.0	0.22	0.13	0.0	0.0	0.0	0.0											
TOTAL	6.48	3.19	1.06	2.84	5.09	12.98	8.18	10.80	4.50	5.90	0.37	0.56											
STA AV	3.43	3.41	2.27	1.84	3.01	10.14	7.28	6.90	4.56	5.54	0.47	0.66											

NOTES: For daily air temperatures in the vicinity (1965), see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 08-002-1. Precipitation values are Thiessen weighted averages of two gauges. STA AV based on 2 yr (1965-1966) record period.

1967 DAILY PRECIPITATION (Inches)												VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.68	0.0	1.34	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	1.76	0.19	0.0	0.0	0.0	0.08	0.0	
3	0.14	0.0	0.20	0.0	0.0	0.55	1.14	0.0	0.10	0.0	0.0	0.0	
4	0.15	0.0	0.0	0.0	0.0	0.02	0.37	0.28	0.59	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	1.68	0.0	1.80	0.12	0.25	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.40	1.90	0.02	0.0	0.51	0.0	0.0	
7	0.0	0.08	0.0	0.0	0.0	0.70	0.44	0.0	0.14	0.0	0.0	0.0	
8	0.0	0.02	0.28	0.0	0.0	0.04	0.50	0.82	0.0	0.0	0.0	0.0	
9	0.0	0.27	0.24	0.0	0.0	0.01	0.23	0.0	0.18	0.24	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.02	0.0	0.0	
11	0.02	0.29	0.0	0.0	0.0	0.0	0.0	0.84	1.10	0.04	0.0	1.18	
12	0.0	0.11	0.0	0.0	0.0	0.0	0.90	0.26	0.11	0.0	0.0	0.18	
13	0.0	0.05	0.0	0.0	0.0	0.19	0.43	0.50	0.79	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.28	2.82	0.0	0.04	0.24	0.0	0.0	
15	0.15	0.0	0.0	0.0	0.0	0.09	0.03	0.04	0.0	0.0	0.0	0.0	
16	0.06	0.0	0.0	0.0	0.01	0.88	0.05	0.33	0.0	0.0	0.33	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.38	0.21	1.17	0.08	0.06	0.0	0.0	
18	0.14	0.0	0.0	0.0	0.0	0.59	0.0	0.13	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.03	0.03	1.26	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.04	0.43	0.25	0.0	0.0	0.0	0.0	
21	0.0	1.35	0.0	0.0	0.0	0.0	0.55	1.29	0.05	0.0	0.0	0.0	
22	0.0	0.38	0.0	0.0	0.23	0.32	0.44	0.07	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	1.13	0.33	0.0	0.0	0.29	0.0	0.05	
24	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.01	0.0	0.73	0.0	0.0	
25	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	1.38	0.0	0.0	0.85	
29	0.0	0.02	0.0	0.0	0.0	0.36	0.0	0.06	0.46	0.0	0.0	0.0	
30	0.0	0.08	0.0	0.0	0.0	2.14	0.0	2.58	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.94	2.54	0.94	0.0	0.23	12.56	11.38	12.39	5.38	3.72	0.41	2.26	
STA AV	2.56	3.12	1.83	1.22	2.08	10.95	8.64	8.73	4.83	4.93	0.85	1.19	

NOTES: For daily air temperatures in the vicinity (1967), see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Hlsc. Pub. 1242, p. 08.002-1. Precipitation values are Thiessen weighted averages of two gages. STA AV based on 3 yr (1965-1967) record period.

1968 DAILY PRECIPITATION (Inches)												VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.04	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.38	1.93	0.04	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	3.00	0.19	3.09	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.43	1.07	0.85	0.63	0.0	0.0	0.0	0.0	
5	0.0	0.31	0.0	0.14	0.04	0.96	0.69	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.02	0.57	0.0	0.0	0.01	0.53	0.0	0.34	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.26	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.56	0.18	0.06	0.46	0.09	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	2.21	0.16	0.0	1.44	0.03	1.47	0.0	
10	0.37	0.0	0.0	0.0	0.05	0.92	0.18	0.16	0.78	1.02	0.0	0.0	
11	0.0	0.16	0.0	0.08	0.02	1.26	0.00	0.0	0.72	0.11	0.49	0.0	
12	0.0	0.0	2.17	0.0	0.0	0.02	0.0	0.0	0.16	0.0	0.0	0.0	
13	0.33	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.88	0.01	3.00	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.25	0.0	0.01	0.0	0.0	
15	0.0	0.0	0.0	0.06	0.43	1.25	0.0	0.13	0.0	1.43	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.73	0.22	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.22	0.02	0.0	0.0	0.0	1.58	0.0	0.0	
18	0.0	0.02	0.0	0.0	0.0	0.23	0.75	0.0	0.0	0.01	0.0	0.0	
19	0.0	0.77	0.0	0.0	1.31	0.73	0.09	0.0	0.28	0.22	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.30	0.07	0.09	0.20	0.0	0.04	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.16	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.45	0.0	0.0	0.27	0.0	0.08	0.98	0.98	0.0	0.0	0.01	
24	0.33	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.40	0.02	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.95	0.65	0.0	0.03	0.05	0.06	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.46	1.28	0.0	0.09	0.80	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.01	0.25	0.01	0.0	0.03	0.01	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.32	0.94	0.0	0.0	0.46	0.02	0.0	0.0	0.07	
29	0.0	0.11	0.0	0.14	0.53	0.0	0.37	0.47	0.0	0.0	0.04	0.0	
30	0.08	0.0	0.0	0.0	0.0	0.0	0.22	0.78	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	
TOTAL	1.10	1.85	0.75	0.44	5.46	18.04	7.74	3.50	7.69	5.73	2.04	0.08	
STA AV	2.20	2.80	1.56	1.03	2.93	12.72	8.42	7.42	5.55	5.13	0.84	0.92	

NOTES: For daily air temperatures in the vicinity (1968), see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Hlsc. Pub. 1330, p. 08.002-1. Precipitation values are Thiessen weighted averages of two gages. STA AV based on 4 yr (1965-1968) record period.



1971 DAILY PRECIPITATION (inches)													VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED #5			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.02	0.0	0.43	0.0	0.39	0.0	0.0	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0				
3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.22	0.0	0.01	0.34				
4	0.0	0.0	0.0	0.10	0.0	0.0	0.44	1.06	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.0	0.06	0.0	0.0	0.43	0.03	0.0	0.29	1.15	0.0				
6	0.0	0.96	0.0	0.0	0.0	0.04	0.12	0.0	0.96	0.08	0.0	0.0				
7	0.0	0.0	0.42	0.0	0.0	0.05	0.04	0.0	0.62	0.22	0.0	0.0				
8	0.0	0.58	0.0	0.0	0.0	0.87	0.19	0.0	0.06	0.65	0.0	0.0				
9	0.0	0.0	0.0	0.0	0.0	2.18	1.16	0.05	0.34	0.30	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.02	0.04	0.46	0.02	0.0				
11	0.0	0.0	0.0	0.0	0.74	1.29	0.0	0.01	0.42	0.10	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.03	2.36	0.00	0.0	0.0				
13	0.0	0.00	0.03	0.0	0.18	0.17	0.0	0.17	0.26	0.01	0.0	0.0				
14	0.0	0.0	0.0	0.0	1.02	0.0	0.09	0.36	0.06	0.0	0.0	0.0				
15	0.0	0.0	0.0	0.0	1.72	0.0	0.11	0.12	0.0	0.0	0.0	0.0				
16	0.0	0.0	0.13	0.0	0.63	0.0	0.00	0.0	0.0	0.18	0.0	0.0				
17	0.0	0.0	0.0	0.0	0.01	2.08	0.0	0.0	0.0	0.35	0.0	0.0				
18	0.05	0.0	0.0	0.0	0.0	0.22	0.0	0.33	0.0	0.05	0.0	0.0				
19	0.08	0.0	0.0	0.0	0.0	0.22	0.0	0.88	0.0	0.20	0.0	0.0				
20	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.04	0.0	0.01	0.0	0.0				
21	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0				
22	0.0	0.02	0.0	0.0	0.0	0.61	0.54	0.0	0.07	0.20	0.0	1.70				
23	0.0	0.87	0.0	0.0	0.0	0.90	0.16	0.34	0.06	0.0	0.0	0.10				
24	0.0	0.0	0.08	0.0	0.0	0.0	0.08	0.0	0.01	0.32	0.0	0.06				
25	0.0	0.08	0.0	0.01	0.0	0.02	0.0	0.24	0.00	0.0	0.0	0.0				
26	0.0	0.0	0.14	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0				
27	0.0	0.0	0.0	0.01	0.0	0.0	0.13	0.28	0.0	0.0	0.0	0.0				
28	0.0	0.0	0.0	0.0	0.57	1.07	0.64	0.01	0.0	0.68	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.13	0.91	0.0	0.00	0.03	0.04	0.0				
30	0.0	0.0	0.27	0.0	0.0	0.02	0.0	0.30	0.04	0.09	0.0	0.0				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.48	0.0	0.0				
TOTAL	0.13	2.11	0.99	0.27	4.87	11.51	6.02	5.46	6.58	4.58	1.26	2.20				
STA #V	2.23	2.49	3.17	0.77	4.28	11.52	7.69	7.53	5.85	5.87	1.25	1.30				

NOTES: For daily air temperatures in the vicinity, see p. 08-002-1. Precipitation values are Thiessen weighted averages of two gauges. STA #V based on 7 yr (1965-1971) record period.

1965 MEAN DAILY DISCHARGE (cfs)													VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED #5			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	8,200	3,400	8,100	7,800	2,800	0,800	4,000	10,000	5,200	18,000	34,000	4,000				
2	8,000	4,000	7,500	7,200	2,800	0,500	4,000	8,500	5,800	51,000	30,000	3,600				
3	4,000	4,000	7,200	5,800	2,400	0,800	4,000	8,500	6,500	36,000	22,000	3,400				
4	3,600	4,000	7,500	8,900	2,200	3,000	4,000	10,000	6,200	25,000	18,000	3,400				
5	3,600	4,200	7,800	4,600	1,800	4,600	4,000	11,000	5,500	15,000	12,000	3,600				
6	8,000	4,000	6,500	4,600	1,800	3,400	4,200	8,500	13,000	12,000	11,000	3,600				
7	3,600	5,500	5,500	4,600	2,200	5,800	4,200	7,500	7,200	12,000	12,000	5,200				
8	3,600	6,200	4,900	4,600	2,400	4,600	4,000	8,100	4,900	16,000	12,000	4,600				
9	3,600	5,500	4,600	4,200	2,800	4,600	4,000	7,000	4,200	15,000	10,000	3,400				
10	3,600	5,200	4,200	4,200	2,700	3,600	4,000	8,100	4,200	12,000	9,000	1,800				
11	8,000	4,600	4,000	4,200	1,800	3,600	4,000	7,800	4,200	9,000	8,500	1,800				
12	8,000	4,000	3,600	4,000	2,200	6,500	4,000	7,500	4,200	7,500	7,800	2,200				
13	8,000	4,000	3,600	3,600	1,800	7,200	4,000	8,100	4,200	7,200	7,200	2,200				
14	4,000	4,000	3,600	4,200	1,600	5,200	3,600	8,100	4,000	6,800	6,800	3,000				
15	4,000	4,600	4,600	4,200	1,800	4,900	3,600	7,800	3,600	12,000	6,500	3,400				
16	3,600	4,000	4,900	4,200	1,800	4,600	3,600	7,800	3,600	18,000	6,200	3,600				
17	3,400	4,000	4,600	4,000	1,600	4,200	4,200	9,500	4,900	15,000	5,200	4,000				
18	3,400	4,000	4,600	3,600	1,800	22,000	5,800	8,200	4,600	12,000	5,200	4,000				
19	3,400	4,600	4,600	3,400	1,800	61,000	9,500	7,500	4,600	9,000	4,600	3,600				
20	3,400	4,600	4,600	3,600	1,600	31,000	7,800	6,800	4,600	7,800	4,900	4,200				
21	3,400	4,600	4,200	3,400	1,600	13,000	10,000	6,200	4,200	7,200	4,600	4,200				
22	3,000	5,200	4,000	3,600	1,800	8,500	44,000	5,200	3,600	7,200	4,600	4,200				
23	3,000	11,000	8,000	3,600	2,200	7,800	39,000	4,600	3,600	13,000	4,200	4,000				
24	3,400	34,000	4,000	4,000	1,600	6,800	31,000	4,900	3,600	15,000	4,200	4,000				
25	3,400	34,000	4,000	3,600	1,800	6,200	18,000	5,200	3,600	12,000	4,200	3,600				
26	3,400	28,000	4,200	3,400	1,000	5,500	12,000	5,200	3,600	9,500	4,200	3,600				
27	3,600	16,000	22,000	3,400	1,000	5,500	9,000	5,200	4,200	8,100	4,900	4,000				
28	3,600	10,000	41,000	3,400	1,600	6,800	7,200	5,200	4,200	7,200	5,800	4,600				
29	3,400		28,000	3,000	1,300	5,200	6,200	4,900	4,900	6,800	5,200	4,600				
30	3,400		13,000	2,000	1,300	4,200	6,500	5,200	5,500	6,200	4,600	4,200				
31	3,600		8,500		1,300		14,000	5,800		11,000		4,200				
MEAN	3.606	8.257	7.852	4.157	1.877	8.380	9.271	7.248	4.873	13.532	9.180	3.684				
INCHES	0.117	0.283	0.256	0.131	0.061	0.264	0.302	0.236	0.154	0.441	0.289	0.120				
STA #V	0.117	0.283	0.256	0.131	0.061	0.264	0.302	0.236	0.154	0.441	0.289	0.120				

NOTES: To convert mean daily discharge in CFS to 19/DAI, multiply by 0.00105056. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA #V based on 1 yr (1965) record period.





1970 MEAN DAILY DISCHARGE (cfs)													VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.10	8.60	9.10	61.00	3.60	34.00	64.00	30.00	6.50	95.00	48.00	4.60	2	8.10	9.10	8.10	44.00	3.00	52.00	41.00	18.00	5.70	45.00	29.00	5.00
3	70.00	171.00	7.70	29.00	3.30	29.00	27.00	11.00	5.40	140.00	20.00	4.60	4	163.00	282.00	7.70	23.00	3.30	17.00	22.00	9.10	5.40	188.00	15.00	4.20
5	95.00	188.00	7.70	16.00	3.30	85.00	55.00	7.70	5.00	128.00	12.00	3.90	6	190.00	93.00	7.70	14.00	3.00	83.00	107.00	10.00	6.50	93.00	10.00	3.90
7	431.00	62.00	7.70	13.00	15.00	89.00	155.00	83.00	10.00	83.00	9.10	3.90	8	230.00	44.00	37.00	9.60	5.70	37.00	478.00	119.00	7.70	191.00	8.10	3.60
9	121.00	33.00	34.00	5.40	4.60	23.00	331.00	386.00	4.60	108.00	7.70	3.30	10	76.00	26.00	29.00	5.40	5.00	14.00	184.00	337.00	3.60	70.00	5.40	3.30
11	59.00	19.00	15.00	6.50	4.20	36.00	100.00	193.00	3.90	51.00	4.20	3.30	12	47.00	16.00	7.70	6.90	4.20	98.00	62.00	140.00	3.90	39.00	4.60	3.30
13	40.00	18.00	140.00	6.90	4.20	89.00	45.00	240.00	3.90	28.00	5.00	3.60	14	31.00	12.00	8.00	6.50	3.90	26.00	34.00	138.00	15.00	23.00	5.00	3.90
15	248.00	11.00	48.00	5.40	3.30	15.00	32.00	108.00	51.00	19.00	5.00	3.90	16	366.00	11.00	31.00	4.60	3.30	11.00	48.00	68.00	23.00	24.00	5.00	3.96
17	195.00	14.00	23.00	4.20	3.30	8.60	29.00	45.00	12.00	52.00	4.60	4.20	18	136.00	13.00	17.00	4.20	3.60	7.30	26.00	30.00	9.10	46.00	4.20	4.60
19	95.00	12.00	13.00	4.20	3.60	6.50	14.00	23.00	7.70	31.00	4.20	3.90	20	68.00	10.00	12.00	4.20	3.30	6.10	12.00	17.00	6.50	23.00	4.20	3.90
21	51.00	9.10	10.00	4.20	3.30	6.50	69.00	98.00	6.10	17.00	4.20	4.20	22	39.00	8.60	11.00	3.90	3.30	8.60	301.00	72.00	6.10	18.00	4.20	3.90
23	31.00	8.10	13.00	3.90	3.30	6.90	243.00	45.00	5.70	15.00	4.60	3.60	24	25.00	7.70	11.00	3.90	6.10	67.00	235.00	34.00	6.50	12.00	4.60	3.30
25	22.00	10.00	40.00	3.90	8.60	107.00	128.00	26.00	12.00	10.00	4.20	3.30	26	19.00	24.00	746.00	4.60	5.70	138.00	74.00	18.00	12.00	9.10	4.20	3.30
27	15.00	12.00	835.00	5.00	6.90	80.00	66.00	14.00	10.00	7.70	4.20	3.30	28	18.00	8.60	678.00	4.60	17.00	41.00	61.00	12.00	7.70	7.30	4.20	3.00
29	12.00	7.70	395.00	6.90	14.00	29.00	14.00	12.00	8.60	6.90	4.20	3.60	30	11.00	182.00	3.90	85.00	90.00	98.00	9.10	102.00	51.00	4.20	3.00	
31	9.60	90.00	90.00	37.00	37.00	56.00	7.70	7.70	119.00	7.70	3.30	3.30	MEAN	94.35	39.17	116.86	10.34	8.93	42.02	107.71	74.86	12.45	60.65	8.44	3.74
													INCHES	3.073	1.152	3.806	0.332	0.291	1.324	3.508	2.438	0.392	1.975	0.266	0.122
													STA AV	0.814	0.460	1.299	0.172	0.402	3.212	3.284	3.305	1.599	2.572	0.786	0.424

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.00105056. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 6 yr (1965-1970) record period.

1971 MEAN DAILY DISCHARGE (cfs)													VERO BEACH, FLORIDA (WILLIAMSON DITCH) WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.60	5.00	5.70	3.30	1.80	1.80	56.00	59.00	64.00	5.00	30.00	3.30	2	3.60	4.20	6.90	2.70	1.80	1.80	95.00	32.00	117.00	4.60	17.00	3.60
3	3.60	4.20	6.10	2.70	1.60	1.80	62.00	16.00	280.00	4.20	15.00	4.60	4	3.30	4.20	6.50	3.30	1.60	1.60	37.00	23.00	170.00	3.90	13.00	5.40
5	3.60	4.60	6.10	3.90	1.60	1.80	31.00	115.00	85.00	4.60	13.00	5.70	6	3.90	5.40	6.90	3.30	1.80	1.80	34.00	83.00	104.00	3.90	110.00	5.70
7	3.90	7.30	7.30	2.70	1.80	2.70	49.00	41.00	238.00	3.90	98.00	5.70	8	4.20	8.60	8.60	2.40	1.80	3.30	59.00	20.00	159.00	8.10	48.00	5.70
9	4.20	7.70	5.40	2.40	1.80	7.70	92.00	12.00	126.00	11.00	26.00	5.40	10	4.20	5.70	3.90	2.10	1.80	66.00	293.00	10.00	119.00	12.00	17.00	5.40
11	3.90	4.20	3.90	2.10	1.80	34.00	146.00	8.10	98.00	23.00	11.00	5.00	12	3.90	3.90	3.60	2.40	1.80	102.00	85.00	6.90	207.00	26.00	7.30	5.40
13	3.60	3.90	3.30	2.70	1.60	126.00	54.00	12.00	618.00	17.00	4.20	5.00	14	3.30	3.90	3.60	2.70	3.80	82.00	32.00	95.00	534.00	13.00	4.60	4.60
15	3.00	3.60	3.90	3.00	9.60	39.00	24.00	83.00	377.00	11.00	5.00	4.60	16	2.70	3.60	4.20	3.00	37.00	16.00	26.00	55.00	230.00	9.60	5.00	4.60
17	2.70	5.00	5.00	3.00	18.00	14.00	17.00	31.00	115.00	11.00	5.00	4.60	18	2.70	5.00	3.90	3.00	8.10	159.00	12.00	32.00	56.00	23.00	5.00	3.90
19	2.70	4.60	3.60	3.00	3.90	112.00	9.10	72.00	36.00	22.00	4.60	3.30	20	2.70	3.90	3.90	2.70	3.00	59.00	186.00	25.00	17.00	4.60	3.30	
21	2.70	5.00	2.70	2.40	2.40	29.00	7.70	82.00	16.00	16.00	4.20	3.30	22	3.00	5.40	3.30	2.10	2.40	70.00	40.00	38.00	7.30	17.00	4.20	3.90
23	3.60	5.70	3.60	1.80	1.80	45.00	40.00	26.00	11.00	14.00	3.90	7.00	24	3.60	6.90	3.90	1.60	1.80	155.00	34.00	30.00	9.60	11.00	3.90	10.00
25	3.00	6.50	3.90	1.60	1.80	212.00	23.00	25.00	8.10	9.60	3.90	9.60	26	3.30	5.70	4.60	1.60	3.00	126.00	18.00	30.00	7.30	8.10	3.60	7.30
27	3.00	5.70	4.60	1.60	3.00	70.00	40.00	32.00	6.50	7.30	3.60	6.90	28	3.60	5.40	5.40	1.60	3.30	65.00	58.00	65.00	5.70	7.70	3.30	8.60
29	3.90	4.60	4.60	1.80	3.90	91.00	91.00	37.00	5.70	14.00	3.30	8.10	30	4.60	3.90	1.60	2.70	77.00	269.00	37.00	5.40	14.00	3.90	6.50	
31	5.00	3.60	3.60	2.10	2.10	2.10	2.10	2.10	128.00	77.00	10.00	10.00	MEAN	3.51	5.17	4.72	2.47	0.33	57.41	62.41	46.32	128.18	11.82	15.50	5.57
INCHES	0.114	0.152	0.154	0.078	0.141	1.809	2.033	1.809	4.040	0.385	0.489	0.182	STA AV	0.714	0.416	1.135	0.159	0.365	3.012	3.105	3.049	1.947	2.260	0.744	0.390

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.00105056. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 7 yr (1965-1971) record period.

## WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)

LOCATION: Oconee Co., Ga.; 7 mi. S.W. of Athens, near Watkinsville, Ga., Oconee River Basin.

AREA: 19.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
P	4.57	6.38	8.78	3.95	3.33	2.88	7.35	7.40	5.08	3.00	4.38	3.84	60.86												
1971	Q	0.007	0.270	1.642	0.015	0.002	0.0	0.002	0.026	0.247	0.0	0.003	0.0	2.214											
STA AV	P	4.73	4.68	6.00	4.43	3.86	3.68	5.07	4.00	3.19	2.91	3.58	4.52	50.67											
	Q	0.475	0.384	0.672	0.435	0.372	0.219	0.384	0.323	0.036	0.063	0.297	0.230	3.890											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge			1 Hour			2 Hours			Maximum Volume for Selected Time Interval			5 Hours			1 Day			2 Days			8 Days				
Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.		
1971	3- 3	0.330	3- 3	0.322	3- 3	0.584	3- 3	1.234	3- 3	1.435	3- 2	1.520	3- 2	1.664	3- 2	1.664									
MAXIMUMS FOR PERIOD OF RECORD																									
	4-25	2.710	6-26	1.840	6-26	2.540	6-26	3.480	6-26	3.780	6-26	3.780	11-26	5.680	11-22	6.640									
	1945		1963		1963		1963		1963		1963		1963		1948		1948								

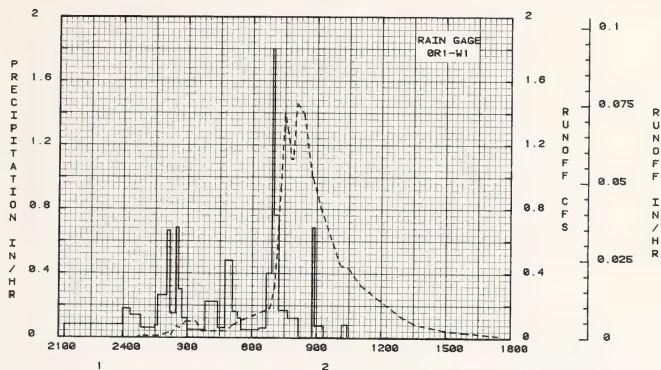
NOTES: Watershed conditions: 1971: Excellent ground cover of pastured Coastal Bermudagrass fertilized in May, July, and August each with 2500 pounds 33.5% Ann. Nitrate, 1667 pounds 15% super phosphate and 1667 pounds 30% potash. 1667 Cow unit grazing days and 99 tons hay produced. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 985, p. 10, 1-8, 9 and 0 records began Sept. 1, 1939. For long-time precipitation records, see National Weather Service records at Athens, Ga. (1885-1939) and Southern Piedmont Conservation Research Center (1940-1971).

1971 DAILY AIR TEMPERATURE (degrees F)													WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
1	50	30	37	18	70	88	71	36	74	50	87	50	85	69	83	68	81	70	88	65	77	69	48	30	
2	59	26	44	24	61	56	61	41	73	44	86	60	85	68	85	70	81	70	88	65	80	69	46	30	
3	51	28	37	28	56	31	67	29	62	40	86	64	84	68	88	70	82	67	87	58	72	50	35	30	
4	66	46	35	29	83	26	70	32	69	37	92	63	83	66	90	68	82	68	84	61	63	36	40	33	
5	64	44	60	34	58	21	59	41	77	45	92	63	84	68	89	70	86	70	86	60	61	32	40	37	
6	48	34	66	26	60	29	55	38	85	50	94	64	83	69	84	70	87	69	80	62	71	50	47	40	
7	51	28	45	33	53	35	62	37	81	60	90	67	87	69	88	69	85	66	74	50	61	36	66	47	
8	38	32	52	24	46	30	69	35	81	63	85	67	88	68	84	66	73	44	53	28	62	40			
9	38	32	29	17	58	24	75	34	78	52	85	65	90	67	90	71	86	64	65	58	43	27	62	36	
10	43	37	40	12	46	33	77	48	72	50	80	64	90	70	87	72	87	66	68	63	62	36	66	53	
11	56	39	56	16	64	30	78	39	76	50	85	68	91	70	89	70	88	69	72	38	69	38	74	49	
12	68	42	62	23	64	38	81	41	80	64	90	63	93	70	84	69	84	63	80	47	70	44	78	50	
13	54	36	51	23	63	42	81	54	66	52	91	65	85	69	84	67	78	59	76	46	74	47	70	45	
14	68	46	17	76	53	72	42	74	46	92	69	91	71	84	64	85	58	83	50	70	46	70	43		
15	60	36	58	25	71	49	73	40	62	60	95	67	83	69	86	63	89	63	78	66	71	42	72	52	
16	44	30	65	30	67	45	78	38	78	56	89	66	80	66	72	70	83	66	84	66	79	45	78	61	
17	48	29	69	37	55	31	83	40	85	51	77	67	88	69	77	67	74	65	77	63	67	46	62	42	
18	45	32	72	35	61	25	88	48	84	52	83	66	90	68	85	63	77	67	68	56	69	45	50	27	
19	33	19	70	40	59	41	80	58	84	56	81	67	86	70	88	69	82	66	73	51	72	44	56	23	
20	42	15	71	54	48	33	86	52	83	58	88	68	82	70	89	67	86	66	68	62	58	40	63	46	
21	53	18	59	52	59	31	76	58	80	59	90	68	87	67	90	70	87	68	66	62	57	32	70	48	
22	60	43	69	49	57	44	78	51	81	49	89	70	82	69	83	70	72	66	71	62	50	26	57	41	
23	61	34	54	36	54	81	54	46	83	58	89	67	84	66	85	72	76	65	71	63	38	32	42	34	
24	49	34	61	32	56	30	71	46	80	67	91	65	84	71	86	68	85	61	73	60	38	32	62	30	
25	52	45	70	30	37	30	76	51	76	60	94	66	84	70	85	68	70	62	76	56	57	31	66	39	
26	58	33	55	38	37	31	82	49	84	50	97	67	84	70	88	68	82	60	79	50	51	30	72	44	
27	33	23	68	41	60	28	76	50	88	51	91	70	87	71	88	68	84	62	78	50	59	35	71	42	
28	50	22	63	33	70	36	88	60	84	59	90	67	87	66	86	59	82	62	77	52	56	30	75	55	
29	62	28	68	46	76	56	72	53	88	67	84	69	82	62	76	56	65	64	65	44	66	50			
30	64	54			62	37	62	50	76	50	86	69	78	70	81	68	89	60	72	64	55	33	71	52	
31	60	24			67	31			86	57			80	69	82	70			80	68					
AV.	53	33	56	31	58	36	73	45	78	53	88	66	86	69	85	68	83	65	76	57	62	40	61	42	
STAN	42.8	43.3	46.9	59.0	65.6	77.1	77.2	76.7	73.7	66.6	51.1	51.7													
STA AV	50.30	55.32	61.37	74.48	79.55	88.65	91.69	86.68	84.64	75.54	62.37	57.37													

NOTES: STA AV based on 3 yr (1969-71) record period.

1971 SELECTED RUNOFF EVENT				WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)							
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MARCH 1 - 2, 1971											
EG 021-W1				EG 021-W1							
3- 1	0.0		3- 1	2117	0.0	0.0	3- 2	10	0.0	0.0	
3- 2		0.0	3- 2	2400	0.0810	0.22		40	0.005	0.0001	
				10	0.1800	0.25		48	0.008	0.0001	
				20	0.1800	0.28		58	0.008	0.0002	
				50	0.1400	0.35		140	0.013	0.0006	
WATERSHED CONDITIONS:				100	0.0600	0.36		208	0.029	0.0011	
Dormant Coastal Bermuda grass				130	0.0600	0.39		215	0.024	0.0012	
-excellent cover.				138	0.0750	0.40		230	0.066	0.0018	
30 Day Antecedent Conditions:				203	0.2640	0.51		240	0.059	0.0023	
Rainfall Runoff				212	0.6667	0.61		256	0.096	0.0034	
Date	Rainfall	Runoff									
(inches)	(inches)	(inches)									
01-31	0.24	0.0000		228	0.1500	0.65		325	0.098	0.0058	
02-04	0.40	0.0000		235	0.6857	0.73		340	0.038	0.0067	
02-05	0.58	0.0022		245	0.3000	0.78		448	0.038	0.0089	
02-07	1.66	0.0970		300	0.1200	0.81		508	0.078	0.0099	
02-08	0.26	0.0000		350	0.0480	0.85		534	0.114	0.0121	
02-12	0.07	0.0000									
02-13	0.25	0.0000		425	0.2229	0.98		650	0.176	0.0216	
02-20	0.57	0.0000		445	0.0600	1.00		703	0.311	0.0243	
02-21	0.42	0.0000		505	0.4800	1.16		706	0.426	0.0252	
02-22	1.52	0.0000		520	0.1600	1.20		710	0.516	0.0269	
02-25	0.02	0.0000		530	0.1200	1.22		720	0.961	0.0332	
02-26	0.54	0.0000									
02-28	0.05	0.0000		620	0.0480	1.26		730	1.405	0.0434	
03-01	0.23	0.0000		640	0.0600	1.28		740	1.270	0.0549	
				655	0.4000	1.38		749	1.110	0.0641	
				700	1.8000	1.53		754	1.110	0.0669	
				715	0.7600	1.72		806	1.355	0.0753	
				740	0.1680	1.79		804	1.460	0.0801	
				810	0.1200	1.85		824	1.350	0.1047	
				848	0.0	1.85		846	1.010	0.1274	
				855	0.6857	1.93		853	0.956	0.1333	
				920	0.0720	1.96		911	0.810	0.1470	
				1010	0.0	1.96		1006	0.446	0.1767	
				1025	0.0800	1.98		1014	0.444	0.1796	
								1029	0.426	0.1854	
								1104	0.317	0.1966	
								1254	0.127	0.2176	
								1334	0.080	0.2212	
								1500	0.035	0.2255	
								1550	0.026	0.2268	
								1724	0.013	0.2283	

NOTES: to convert runoff in CFS to IN/HR, multiply by 0.051653.



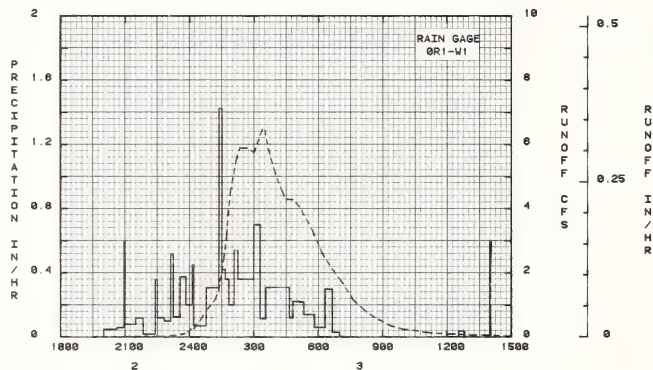
EVENT OF MARCH 1 - 2, 1971  
WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)

1971 SELECTED RUNOFF EVENT				WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)							
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 2 - 4, 1971											
3- 2	RG 081-W1		3- 2	2000	0.0	0.0	3- 2	1930	0.005	0.0	
	1.98	0.229		2037	0.0487	0.03		2100	0.005	0.2297	
				2057	0.0600	0.05		2113	0.007	0.2298	
				2100	0.0000	0.00		2230	0.021	0.2307	
				2130	0.0800	0.12		2252	0.020	0.2311	
WATERSHED CONDITIONS:				2150	0.1200	0.16		2313	0.055	0.2318	
Dormant coastal Bermuda grass				2225	0.0171	0.17		2322	0.048	0.2322	
-excellent cover.				2230	0.3600	0.20		2338	0.091	0.2331	
30 Day Antecedent Conditions:				2250	0.1200	0.24		2347	0.113	0.2339	
	Rainfall	Runoff		2308	0.1000	0.27		2355	0.166	0.2349	
	Date (inches)	(inches)		2315	0.5183	0.33	3- 3	5	0.258	0.2367	
01-31	0.24	0.0000		2334	0.1263	0.37		12	0.263	0.2382	
02-04	0.40	0.0000		2350	0.3750	0.47		32	0.537	0.2451	
02-05	0.58	0.0022		8	0.2000	0.53		50	0.859	0.2559	
02-07	1.66	0.0970	3- 3	12	0.4500	0.56		112	1.166	0.2751	
02-08	0.26	0.0000		47	0.0686	0.60		122	1.458	0.2864	
02-12	0.07	0.0000		122	0.1086	0.76		136	2.435	0.3098	
02-13	0.25	0.0000		130	1.8250	0.97		144	3.182	0.3292	
02-20	0.57	0.0000		140	0.4200	1.04		148	3.809	0.3412	
02-21	0.42	0.0000		150	0.3600	1.10		154	4.512	0.3627	
02-22	1.52	0.0000		205	0.2000	1.15		210	5.520	0.4318	
02-25	0.02	0.0000		215	0.5400	1.24		220	5.890	0.4809	
02-26	0.54	0.0000		300	0.3600	1.51		240	5.890	0.5823	
02-28	0.05	0.0000		318	0.7000	1.72		300	5.740	0.6825	
03-01	0.23	0.0000		334	0.1125	1.75		323	6.460	0.8033	
03-02	1.76	0.2293		440	0.3091	2.09		330	6.460	0.8422	
				450	0.1200	2.11		340	5.855	0.8952	
				509	0.2211	2.18		400	5.079	0.9893	
				520	0.2182	2.22		424	4.385	1.0871	
				550	0.1400	2.29		430	4.287	1.1095	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.051653.

1971 SELECTED RUNOFF EVENT						WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Date (cfs)	Acc. (inches)	
EVENT OF MARCH 2 - 4, 1971 (CONTINUED)											
3- 3	620	0.0600	2.32	3- 3	448	4.285	1.1759				
	660	0.3000	2.42		508	4.056	1.2477				
	700	0.0300	2.43		585	3.291	1.3687				
	1234	0.0	2.43		610	2.634	1.4285				
	1250	0.0375	2.44		640	2.114	1.4898				
	1401	0.0	2.44		710	1.657	1.5385				
	1405	0.6000	2.48		738	1.156	1.5723				
					814	0.795	1.6024				
					838	0.613	1.6168				
					920	0.358	1.6344				
					958	0.237	1.6441				
					1040	0.176	1.6516				
					1106	0.184	1.6552				
					1210	0.086	1.6615				
					1310	0.058	1.6652				
					1400	0.048	1.6675				
					1620	0.016	1.6715				
					1830	0.005	1.6728				
					2100	0.002	1.6732				
					2340	0.002	1.6735				
					3- 4	354	0.001	1.6738			
					830	0.0	1.6739				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.051653.



EVENT OF MARCH 2 - 4, 1971  
WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)

## BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)

LOCATION: Montgomery County, Va., 2 mi. W. of Christiansburg, Va., New River.

AREA: 786.00 acres 1.23 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
P	1.72	4.46	2.20	3.00	7.43	3.10	4.47	2.86	3.62	5.58	2.14	0.79	41.36														
1971 Q	0.145	1.065	0.357	0.251	0.570	0.395	0.289	0.374	0.239	1.056	0.431	0.369	5.541														
STA AV P	2.12	2.65	2.97	2.68	3.16	2.58	3.78	3.52	3.00	2.87	2.21	2.70	38.25														
Q	0.612	0.713	0.973	0.722	0.511	0.277	0.246	0.288	0.204	0.276	0.240	0.408	5.466														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
Date	Date	1 Hour	Date	2 Hours	Date	6 Hours	Date	12 Hours	Date	1 Day	Date	2 Days	Date	8 Days	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	10-25	0.229	10-25	0.207	10-25	0.347	10-25	0.542	10-25	0.590	10-25	0.635	10-25	0.683	10-23	0.846											
MAXIMUMS FOR PERIOD OF RECORD																											
8-21	0.230	10-25	0.207	10-25	0.347	10-25	0.542	10-25	0.590	10-25	0.635	8-3	0.730	3-27	1.760												
1966		1971		1971		1971		1971		1971		1960		1960													

NOTES: Watershed conditions: Cultivated, alfalfa and other hay crops, 28%; row crop, 10%; permanent pasture, usually good cover of native bluegrass combined with other grasses and clovers, 43%; farm woods predominantly hard wood, 13%; idle, 5%; roads, 1%. For topographic map of watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13-7-5. Precipitation Thiessen weighted from rain gages R-1, R-2, R-3, and R-4. Station average precipitation determined from record period from August 1957 through 1971. For long-time precipitation records, see National Weather Service records for Blacksburg, Virginia.

1969 DAILY AIR TEMPERATURE (degrees F)													BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	28	10	48	43	30	26	58	31	65	43	87	62	86	66	79	63	82	63	68	50	55	53	43	25	
2	32	15	46	38	36	28	69	46	73	43	80	50	86	65	86	64	77	64	76	38	64	54	45	22	
3	36	18	40	24	42	26	73	49	50	48	72	46	88	65	76	63	74	64	69	57	63	43	42	27	
4	21	7	38	20	42	25	67	47	84	52	76	44	87	62	70	61	74	63	75	51	50	39	28	22	
5	29	5	51	36	44	22	69	56	83	56	80	57	96	68	79	59	76	62	56	50	40	34	42	22	
6	28	14	46	33	38	29	63	42	83	54	87	54	93	70	80	57	84	64	67	52	51	38	40	24	
7	29	14	47	33	34	28	73	34	85	56	85	45	90	67	82	57	83	62	66	53	52	40	36	30	
8	40	15	38	30	45	25	78	42	73	61	94	64	80	63	83	60	75	61	68	50	48	40	42	36	
9	58	23	32	20	39	25	73	50	65	40	81	59	72	63	85	65	68	50	69	41	58	40	40	33	
10	27	14	36	18	29	25	60	53	66	40	63	58	75	67	74	68	64	48	72	47	56	40	40	36	
11	32	15	41	22	25	15	65	46	56	37	83	59	80	68	77	55	69	44	75	51	61	38	48	40	
12	30	13	33	19	33	11	66	42	60	37	82	65	82	66	76	59	71	47	80	54	58	37	39	29	
13	32	12	25	15	38	20	62	39	72	37	83	66	82	63	74	59	72	46	79	59	49	35	42	26	
14	32	13	30	13	41	26	50	44	70	48	82	65	84	58	76	64	76	48	61	45	42	20	47	32	
15	44	13	29	17	44	23	56	46	74	53	83	65	83	62	78	66	79	53	53	44	30	17	36	29	
16	40	23	32	22	53	24	76	54	72	55	67	52	90	62	74	67	79	53	66	48	53	24	32	22	
17	52	30	42	20	60	27	80	50	75	55	70	53	90	64	81	66	78	60	55	39	56	26	37	21	
18	52	42	43	27	48	38	66	57	68	59	80	61	91	67	80	67	76	56	63	35	59	40	40	22	
19	48	35	39	26	65	36	65	35	72	60	84	62	80	68	79	66	56	50	76	40	59	28	38	29	
20	35	30	43	24	67	39	57	34	82	59	85	60	89	68	78	60	55	52	78	52	36	26	33	23	
21	38	32	48	27	59	37	68	42	77	55	86	61	87	66	78	58	56	52	64	45	48	22	37	21	
22	42	34	31	26	52	30	56	41	82	56	81	64	85	66	73	58	66	51	58	35	54	26	35	26	
23	44	40	44	29	56	28	47	37	78	59	80	65	84	69	78	52	70	47	49	30	59	38	34	24	
24	61	33	41	33	56	39	53	37	87	57	89	64	84	68	79	50	58	50	28	58	39	35	25		
25	33	22	34	29	49	35	69	37	77	57	87	67	84	67	84	56	72	54	52	36	53	31	28	23	
26	32	6	29	24	41	28	78	43	80	50	90	64	86	62	79	59	75	52	64	48	52	37	30	25	
27	30	20	31	22	37	27	80	52	65	52	92	71	84	66	78	59	75	49	65	43	51	30	29	22	
28	28	23	43	13	54	23	75	55	84	49	94	69	85	66	80	55	66	47	52	36	50	34	45	23	
29	58	26			59	34	62	38	80	58	93	68	80	62	82	53	66	42	51	33	51	26	41	34	
30	62	52			49	25	63	36	92	62	91	65	80	58	82	58	72	45	53	32	43	28	55	15	
31	55	39			46	21			91	61			83	59	81	56			54	43			54	31	
AV.	39	22	39	25	46	27	66	44	75	52	83	61	85	65	79	60	72	54	64	45	52	38	39	27	
MEAN	30.6	31.9	36.3	54.9	63.5	71.9	75.0	69.4	62.8	54.4	43.2	33.1													
STA AV	39	22	39	22	52	30	62	42	70	50	78	56	81	61	79	59	70	51	62	40	50	32	41	25	

NOTES: Temperature data obtained at the R-3 rain gage location. STA AV based on 5 yr (1965-69) record period.

1970 DAILY AIR TEMPERATURE (degrees F)												
ELACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	34 31	52 31	47 32	46 42	72 58	79 62	90 73	88 68	80 63	73 48	58 54	62 47
2	41 28	55 40	60 40	58 35	74 51	79 64	89 68	86 67	82 62	76 55	62 50	66 47
3	34 23	45 48	59 40	56 34	57 46	79 61	90 66	87 63	82 67	76 53	50 40	60 44
4	33 19	29 3	48 38	62 37	60 46	78 60	87 64	82 63	81 66	73 48	40 35	61 38
5	82 24	41 27	54 37	51 31	73 45	79 55	75 57	77 60	78 65	72 40	51 39	55 28
6	32 29	46 30	51 30	54 36	58 42	75 54	78 55	77 65	80 62	78 45	62 40	42 22
7	29 7	48 29	56 29	50 38	70 37	76 49	79 55	78 63	82 61	74 50	64 47	32 20
8	11 7	47 37	59 39	69 32	78 49	83 53	83 62	78 65	82 61	70 56	65 41	52 22
9	10 8	40 34	65 36	70 37	80 55	83 55	77 63	66 58	82 63	71 60	52 40	53 30
10	25 6	34 29	67 31	63 45	77 57	84 55	80 60	61 58	82 65	73 62	54 50	60 48
11	38 14	38 29	61 41	66 39	75 59	83 56	80 59	75 58	75 60	73 62	58 52	55 40
12	36 24	36 27	49 35	70 44	77 57	84 57	84 62	78 59	70 58	75 58	56 48	55 40
13	35 21	40 29	38 30	56 44	81 58	85 62	83 62	79 62	84 58	77 56	55 45	45 35
14	43 23	34 24	35 25	58 42	81 57	69 59	87 68	83 60	85 61	77 59	52 44	45 32
15	40 28	49 25	33 22	60 44	72 60	68 60	89 66	85 63	86 61	71 53	52 34	46 34
16	50 23	42 32	37 20	70 41	67 57	82 61	83 62	86 64	87 60	54 37	41 30	38 34
17	40 34	42 31	46 24	64 49	60 45	85 63	83 57	85 66	85 62	58 32	49 26	43 36
18	42 31	62 32	58 35	74 52	68 43	86 68	87 61	85 65	84 64	66 32	46 33	57 32
19	33 25	51 27	56 41	57 47	80 45	82 64	84 64	85 65	78 63	68 38	60 40	55 44
20	29 11	34 23	51 38	69 46	81 54	76 61	86 64	84 63	73 60	54 48	58 45	53 38
21	15 3	42 18	46 39	71 52	83 59	81 62	70 59	84 65	86 64	58 53	54 35	44 40
22	26 6	54 30	40 35	70 50	84 59	81 59	65 58	75 66	89 68	68 51	60 38	58 40
23	30 16	49 34	49 37	74 58	84 56	78 58	77 62	74 63	89 65	69 46	52 15	44 30
24	36 21	55 28	45 32	74 53	85 59	83 61	86 67	78 58	85 65	68 45	25 13	53 28
25	52 29	47 14	62 34	70 48	80 62	84 64	83 67	75 55	87 62	67 54	34 14	40 26
26	52 39	40 9	58 36	54 52	76 55	80 63	85 66	79 58	85 63	64 48	59 27	26 16
27	52 32	54 28	52 32	74 53	78 53	81 54	83 69	82 59	67 48	53 48	62 34	35 24
28	54 36	57 32	62 36	70 57	74 50	73 51	87 67	85 58	64 47	50 46	62 51	34 24
29	58 39		51 32	81 59	66 56	79 52	91 68	84 59	62 43	51 46	59 49	33 22
30	39 27		41 33	74 61	64 52	85 58	84 66	85 63	74 44	56 50	66 52	40 20
31	44 28		57 33		73 59		88 66	80 70		57 54		31 25
AV.	37 22	45 26	51 34	65 46	74 53	80 59	83 63	80 62	80 60	66 49	54 39	48 33
REAN	29.3	35.8	42.5	55.2	63.4	69.2	73.2	71.3	70.3	57.9	46.4	40.8
STA AV	39 22	40 23	52 31	63 43	71 51	78 57	81 61	79 60	72 53	63 42	51 33	42 26

NOTES: Temperature data obtained at the R-3 rain gage location. STA AV based on 6 yr (1965-70) record period.

1971 DAILY AIR TEMPERATURE (degrees F)												
ELACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	35 26	14 0	62 40	64 39	64 36	79 52	82 65	82 65	78 60	66 62	72 62	38 22
2	45 25	21 2	45 35	54 33	53 41	75 60	80 64	78 65	72 61	68 63	76 63	34 18
3	44 27	26 16	35 16	56 28	41 33	83 56	76 59	83 63	70 61	80 62	63 38	23 20
4	58 37	26 18	24 14	66 35	57 34	83 58	87 57	75 55	84 65	80 60	79 61	48 33 42 21
5	58 30	48 24	48 17	62 42	68 40	87 62	80 53	66 61	82 63	75 62	51 26	36 29
6	36 26	46 28	57 28	46 30	63 52	88 60	84 64	71 60	86 62	70 53	59 36	49 32
7	31 23	36 30	42 20	41 29	62 51	87 61	83 63	82 62	83 64	59 42	52 22	66 48
8	30 23	31 15	28 18	58 36	69 51	80 60	84 61	81 57	86 57	62 35	41 17	53 45
9	47 24	18 6	40 18	71 34	66 46	78 58	89 63	88 60	84 57	57 48	81 25	58 48
10	53 28	23 1	41 29	58 36	71 44	75 57	88 63	84 66	80 60	57 43	48 31	62 42
11	56 37	46 12	49 31	70 33	67 49	81 56	86 64	84 65	75 64	65 44	56 33	60 47
12	48 40	49 30	58 31	75 40	68 55	77 58	74 58	78 60	66 55	72 44	62 37	62 42
13	41 34	41 15	65 40	79 50	66 43	77 62	82 61	80 54	66 56	70 46	67 46	68 45
14	60 44	21 9	69 33	80 66	68 52	80 61	80 66	82 53	76 53	73 54	59 40	50 38
15	51 25	39 18	59 46	60 33	58 48	78 60	82 62	84 52	86 53	74 44	70 42	62 54
16	31 23	45 24	59 33	66 35	66 49	62 56	82 58	80 56	80 60	62 56	70 47	68 52
17	35 27	54 28	33 24	73 38	78 52	65 56	84 59	70 64	76 57	64 54	66 38	51 17
18	32 18	60 34	52 20	72 54	81 51	67 60	83 62	68 62	64 62	63 46	68 39	27 12
19	24 14	62 37	48 30	74 47	82 54	79 60	76 64	81 62	72 62	69 42	60 41	45 19
20	30 15	63 45	62 24	77 45	79 56	81 61	76 59	84 60	60 52	66 55	30 21	58 36
21	43 20	57 36	48 24	69 46	68 52	79 61	73 58	84 65	65 57	56 52	45 27	60 36
22	45 36	49 41	57 36	52 38	66 48	76 59	80 56	78 63	57 54	58 44	29 17	42 22
23	46 33	42 29	36 21	42 36	70 41	75 62	79 57	82 63	75 54	59 56	30 16	34 18
24	35 30	38 28	32 16	59 35	70 56	83 62	79 60	79 55	71 54	68 56	30 23	55 30
25	56 36	54 29	41 17	65 40	74 56	86 61	78 62	82 54	60 52	66 55	30 21	58 36
26	47 20	52 42	27 22	66 48	74 50	83 64	80 66	81 58	74 53	65 49	40 19	60 43
27	19 12	46 23	62 38	68 51	87 63	78 59	82 62	80 64	75 58	64 48	42 31	62 47
28	27 16	56 35	64 37	70 48	62 44	89 64	86 56	75 55	80 62	73 49	44 33	60 39
29	42 18		53 45	61 39	47 43	84 62	80 67	79 52	76 52	72 50	42 35	58 30
30	50 25		44 28	60 34	56 46	83 62	76 62	83 51	74 59	71 53	41 29	62 46
31	24 5		59 31		76 51		74 62	83 54		66 60		50 27
AV.	41 26	42 24	47 28	63 38	66 47	80 60	80 61	80 59	75 59	66 51	51 33	52 34
REAN	33.7	31.2	37.2	50.8	56.7	69.7	70.6	69.7	66.8	59.0	42.3	43.1
STA AV	39 23	40 23	51 31	63 42	70 50	78 57	81 61	79 60	72 54	63 43	51 33	43 27

NOTES: Temperature data obtained at the R-3 rain gage location. STA AV based on 7 yr (1965-71) record period.

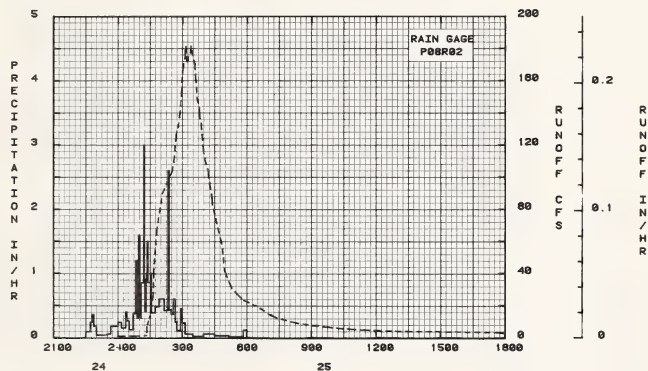


1971 SELECTED RUNOFF EVENT				BLACKSBURG, VIRGINIA CHAB CREEK WATERSHED (13007)							
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Date (cfs)	Acc. (inches)	
EVENT OF OCTOBER 24 - 25, 1971											
10-24	BG P08R02 0.01	0.033	10-24	BG P08R02 2230	0.0	0.0	10-24	2400	0.888	0.0	
				2243	0.0923	0.02	10-25	20	0.888	0.0004	
				2248	0.2399	0.04		100	0.935	0.0012	
				2253	0.3599	0.07		114	1.030	0.0015	
				2300	0.1715	0.09		119	1.308	0.0016	
WATERSHED CONDITIONS:											
	Permanent pasture, blue grass			2330	0.0400	0.11		120	3.043	0.0016	
	combined with other native			2340	0.0600	0.12		121	6.649	0.0017	
	grasses and clover, good			2350	0.1800	0.15		122	7.997	0.0018	
	cover, 43%; row crop, 10%;		10-25	2400	0.1800	0.18		126	10.121	0.0026	
	alfalfa and other hay, good			10	0.2401	0.22		128	11.857	0.0031	
	cover, 28%; idle with weeds,			22	0.1500	0.25		130	13.362	0.0037	
	grasses, and vines, good			25	0.4001	0.27		135	20.258	0.0054	
	cover, 5%; bare woods			32	0.2571	0.30		138	25.576	0.0069	
	predominately hard wood, 13%;			42	0.1199	0.32		139	28.167	0.0074	
	paved roads, 1%.			50	0.3750	0.37		140	40.063	0.0081	
				54	1.2000	0.45		148	65.885	0.0170	
				58	0.3001	0.47		204	90.034	0.0435	
				101	1.6000	0.55		231	103.388	0.0983	
				105	0.2998	0.57		238	113.311	0.1143	
				112	0.8572	0.67		241	122.821	0.1213	
				114	3.0002	0.77		244	128.536	0.1294	
				116	0.9000	0.80		248	130.905	0.1403	
				119	0.3998	0.82		254	141.383	0.1577	
				122	1.0001	0.87		258	156.069	0.1702	
				124	1.5001	0.92		301	168.599	0.1806	
				131	0.8572	1.02		302	168.282	0.1839	
				134	0.9998	1.07		303	170.676	0.1872	
				145	0.3619	1.14		307	174.440	0.2017	
				155	0.4800	1.22		308	175.394	0.2061	
				210	0.6000	1.37		309	181.343	0.2097	
				220	0.4200	1.44		310	176.969	0.2132	
				223	2.5998	1.57		311	174.741	0.2167	
				230	0.4286	1.62		312	171.793	0.2210	
				235	0.3600	1.65		315	172.776	0.2320	
				240	0.6000	1.70		316	175.082	0.2354	
				245	0.2400	1.72		322	177.325	0.2571	
				256	0.1090	1.74		324	181.565	0.2651	
				300	0.4502	1.77		334	170.501	0.3024	
				308	0.2250	1.80		335	166.753	0.3057	
				330	0.0545	1.82		336	163.448	0.3090	
				400	0.0200	1.83		338	158.843	0.3161	
				430	0.0600	1.86		341	149.047	0.3252	
				450	0.0300	1.87		347	141.423	0.3438	
				510	0.0300	1.88		349	136.390	0.3500	
				550	0.0150	1.89		352	132.530	0.3580	
				600	0.1200	1.91		354	126.317	0.3637	
								356	122.821	0.3686	
								400	114.627	0.3791	
								406	107.929	0.3928	
								412	102.584	0.4063	
								414	99.116	0.4103	
								416	95.368	0.4146	
								422	87.775	0.4259	
								424	82.655	0.4297	
								450	58.324	0.4683	
								458	41.633	0.4767	
								505	37.519	0.4826	
								518	30.608	0.4918	
								546	24.165	0.5000	
								552	22.889	0.5109	
								606	21.716	0.5175	
								620	19.758	0.5236	
								626	19.766	0.5260	
								706	13.941	0.5402	
								724	12.166	0.5452	
								824	8.718	0.5584	
								908	7.284	0.5658	
								920	7.284	0.5676	
								944	6.467	0.5711	
								1028	5.484	0.5766	

NOTES: To convert CFS to IS/HR, multiply by 0.0012617.

1971 SELECTED RUNOFF EVENT BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)											
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 24 - 25, 1971 (CONTINUED)											
							10-25	1104	4.930	0.5806	
								1128	4.692	0.5830	
								1216	4.224	0.5875	
								1340	3.796	0.5906	
								1740	3.202	0.6123	
								2240	2.512	0.6303	
								2400	2.512	0.6345	

NOTES: To convert CFS to IN/HR, multiply by 0.0012617.



EVENT OF OCTOBER 24 - 25, 1971  
BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)

## BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)

LOCATION: Floyd County, Va.: 1 mi. W. of Terrys Fork, Va. Little River, New River.

AREA: 893.00 acres 1.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)																			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																				
1971 P	1.02	3.67	1.29	3.06	7.71	3.57	3.58	1.57	4.20	6.67	2.04	0.68	39.04																				
Q	0.944	5.272	1.111	1.238	2.326	1.550	1.008	0.737	0.862	2.086	1.998	1.323	20.476																				
STA AV P	2.13	2.84	2.97	2.90	3.48	2.51	3.78	3.58	3.41	3.21	2.42	2.73	35.96																				
Q	1.467	2.062	2.152	1.742	1.522	0.980	0.880	0.845	1.009	1.186	1.219	1.461	16.745																				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																	
Maximum Discharge												Maximum Volume for Selected Time Interval																					
Date		Rate		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days																	
Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.							
1971		5-20		0.122		5-20		0.099		5-20		0.154		5-20		0.248		5-20		0.310		2-4		0.464		2-4		0.844		2-4		3.199	
MAXIMUMS FOR PERIOD OF RECORD																																	
9-30		1.160		9-30		0.620		9-30		0.910		9-30		1.620		9-30		2.170		9-29		2.590		9-29		2.810		9-29		3.230			
1959				1959				1959				1959				1959				1959				1959				1959					

NOTES: Watershed conditions: Permanent pasture, usually a fair cover of native grasses, 33%; farm woods, a mixture of hardwoods and conifers, 34%; row crops, 4%; hay, 20%; idle land, 7%; roads, 2%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1191, p. 13.8-5. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from August 1957 through 1971. For long-time precipitation records, see National Weather Service records at Blacksburg, Virginia.

1971 DAILY PRECIPITATION (inches)												BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.035	0.0	0.0	0.0	0.0	0.0	0.05	0.01	0.0	1.08	0.14	0.0											
2	0.0	0.0	0.12	0.03	0.01	0.0	0.0	0.11	0.0	0.09	0.05	0.0											
3	0.0	0.222	0.605	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.37	0.135											
4	0.06	0.442	0.015	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0											
5	0.16	0.602	0.0	0.0	0.08	0.0	0.0	0.01	0.0	0.08	0.0	0.012											
6	0.0	0.0	0.0	1.442	0.92	0.0	0.11	0.0	0.03	0.07	0.0	0.082											
7	0.0	0.395	0.035	0.352	0.46	0.09	0.0	0.0	0.0	0.0	0.01	0.35											
8	0.0	0.258	0.0	0.0	0.022	0.32	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	1.03	0.0	0.0											
10	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.0											
11	0.0	0.0	0.035	0.0	0.0	0.01	0.10	0.37	1.10	0.0	0.0	0.0											
12	0.0	0.09	0.0	0.0	0.51	0.35	0.12	0.0	0.71	0.0	0.0	0.05											
13	0.20	0.905	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.03	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.06	0.0	0.07	0.0	0.52	0.42	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.14	0.91	0.27	0.0	0.07	0.41	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.01	0.01	0.07	0.0	0.02	0.0	0.01											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.06	0.23	0.03	0.0	0.0											
19	0.0	0.0	0.02	0.0	0.0	0.0	0.09	0.0	0.47	0.02	0.08	0.02											
20	0.0	0.04	0.0	0.0	1.738	0.0	0.0	0.0	1.35	0.28	0.0	0.02											
21	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.12	0.12	0.05	0.0											
22	0.14	0.63	0.01	0.01	0.0	0.30	0.0	0.52	0.02	0.26	0.0	0.0											
23	0.18	0.0	0.04	0.24	0.0	1.032	0.0	0.0	0.10	1.65	0.0	0.0											
24	0.132	0.0	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.05	0.905	0.0											
25	0.0	0.0	0.065	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.0											
26	0.0	0.02	0.275	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.10	0.0	0.10	0.022	0.0	0.0	0.0	0.0	0.0	0.205	0.0											
28	0.0	0.0	0.0	0.70	0.762	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.262	0.05	1.74	0.0	0.0	0.0	0.0	0.24	0.0											
30	0.02	0.0	0.0	0.0	0.472	0.0	0.43	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.012	0.012	0.0	0.28	0.0	0.25	0.0	0.0	0.0											
TOTAL	1.02	3.67	1.29	3.04	7.71	3.57	3.58	1.57	4.20	6.67	2.04	0.68											
STA AV	2.13	2.84	2.97	2.90	3.48	2.51	3.78	3.58	3.41	3.21	2.42	2.73											

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period August 1957 through 1971.

1971 MEAN DAILY DISCHARGE (cfs)												
BLACKSBURG, VIRGINIA					BRUSH CREEK WATERSHED (13008)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.900	0.776E	1.309E	0.987	1.052	2.478	1.167	1.236	0.575	2.379	2.287	1.864
2	0.909	0.846E	1.683E	1.113	1.081	2.013	1.164	1.176	0.585	2.731	1.980	1.587
3	0.895	0.846E	3.279E	1.012	1.177	1.808	1.100	1.004	0.619	1.318	2.998	1.647
4	2.328	3.220E	2.143E	0.940	1.039	1.616	1.004	1.694	0.620	1.957	1.637	1.637
5	3.627	17.401E	1.819E	0.963	1.040	1.498	0.961	1.359	0.629	1.060	1.792	1.554
6	1.539	16.309E	1.695E	2.461	3.194	1.384	1.040	1.179	0.606	1.184	1.738	1.985
7	1.171	13.828E	1.509E	3.017	3.104	1.379	1.001	1.014	0.584	0.938	1.626	3.579
8	0.997	14.350E	1.374E	4.938	3.286	1.795	0.925	0.912	0.569	0.897	1.580	2.363
9	1.005	16.533E	1.339E	3.105	1.606	1.431	0.889	0.823	0.551	3.033	1.601	2.004
10	0.985	15.195E	1.304E	2.082	1.337	1.315	0.876	0.805	0.537	2.639	1.943	1.847
11	0.935	15.815E	1.227	1.694	1.251	1.226	0.939	1.127	1.987	1.453	1.491	1.646
12	1.003	16.978E	1.258	1.450	1.794	1.547	1.115	1.026	1.194	1.423	1.620	1.620
13	1.061	14.784E	1.207	1.327	5.565	1.500	0.946	0.841	1.130	1.079	1.423	1.592
14	1.528	13.191E	1.165	1.242	2.388	1.414	0.882	0.793	0.793	1.031	1.423	1.531
15	1.254	13.280E	1.280	1.192	2.289	1.572	0.830	0.689	0.691	1.000	1.423	1.531
16	1.087	8.384E	1.134	1.157	3.759	4.856	1.108	0.669	0.677	1.566	1.393	1.472
17	0.979	1.420E	1.063	1.127	2.165	1.984	0.822	0.786	0.704	1.420	1.351	1.423
18	0.909	1.340E	1.052	1.056	1.678	1.662	1.155	0.934	0.899	1.239	1.351	1.295
19	0.832	1.461E	1.127	1.063	1.431	1.432	1.265	0.828	1.429	1.114	1.435	1.418
20	1.116	1.828E	1.094	1.063	10.901	1.328	0.947	0.728	2.402	1.434	1.399	1.534
21	0.722	1.577E	0.996	1.175	5.186	1.266	0.851	0.687	2.148	1.795	1.351	1.394
22	0.946	3.595E	1.050	1.209	2.448	1.710	0.811	1.321	1.446	1.934	1.258E	1.372
23	1.592	2.788E	1.066	1.463	1.890	8.757	0.741	0.926	1.200	10.293	1.279E	1.351
24	1.079	1.890E	0.971	1.249	1.721	2.480	0.779	0.714	1.110	6.576	11.563E	1.351
25	1.425	1.643E	1.009	1.018	1.568	1.848	0.866	0.675	0.935	13.978	6.817E	1.328
26	1.215	1.596E	1.120	1.000	1.353	1.516	0.864	0.677	0.899	3.434	4.736E	1.305
27	0.860E	1.581E	1.609	1.006	1.340	1.358	0.766	0.649	0.891	2.532	5.578E	1.279
28	0.846E	1.339E	1.523	2.883	2.999	2.232	0.712	0.629	0.868	2.106	3.424	1.279
29	0.846E		1.226	1.264	6.735	1.228	6.590	0.592	0.825	1.899	3.244	1.279
30	0.846E		1.047	1.140	7.923	1.173	1.953	0.581	0.823	1.806	2.379	1.279
31	0.792E		1.017		3.962		2.741	0.583		2.112		1.279
MEAN	1.1686	7.064E	1.3449	1.5478	2.8149	1.9387	1.2197	0.8922	1.0786	2.5247	2.4983	1.6008
INCHES	0.966	5.272	1.111	1.238	2.326	1.560	1.008	0.737	0.862	2.086	1.998	1.323
STA AV	1.687	2.062	2.152	1.742	1.522	0.980	0.880	0.845	1.009	1.186	1.219	1.461

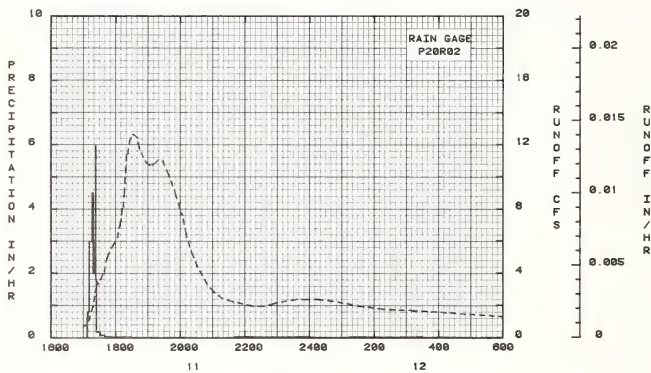
NOTES: To convert CFS to IN/DAY, multiply by 0.026652. STA AV based on record period August 1957 through 1971.

1971 SELECTED RUNOFF EVENT												
BLACKSBURG, VIRGINIA					BRUSH CREEK WATERSHED (13008)							
ANTECEDENT CONDITIONS					RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Date	Time	Acc.	
No-day	(inches)	(inches)	No-day	of Day	(in/hr)	(inches)	No-day	of Day	(cfs)	(cfs)	(inches)	
EVENT OF SEPTEMBER 11 - 12, 1971												
BG P20R02												
9-11	0.20	0.014	9-11	1707	0.0	0.0	9-11	1700	0.693	0.0		
				1708	0.6002	0.01		1704	0.792	0.0001		
				1711	0.8001	0.05		1710	1.063	0.0002		
				1713	2.9995	0.15		1718	1.963	0.0004		
				1716	2.9997	0.30		1725	3.368	0.0007		
WATERSHED CONDITIONS:												
				1718	4.5009	0.45		1726	3.467	0.0008		
				1721	2.0000	0.55		1728	3.323	0.0009		
				1722	3.0009	0.60		1735	3.845	0.0014		
				1723	5.9954	0.70		1736	3.962	0.0015		
				1724	1.8013	0.73		1739	4.106	0.0017		
				1731	0.1713	0.75		1743	4.880	0.0020		
				1740	0.0667	0.76		1748	5.313	0.0025		
				1830	0.0120	0.77		1752	5.610	0.0029		
				2142	0.0	0.77		1759	5.952	0.0037		
				2400	0.0304	0.84		1803	6.231	0.0041		
			9-12	115	0.0	0.84		1810	7.384	0.0050		
				330	0.0133	0.87		1812	8.032	0.0053		
								1814	8.140	0.0056		
								1816	9.013	0.0059		
								1817	9.662	0.0061		
								1819	10.697	0.0065		
								1820	11.382	0.0067		
								1822	11.463	0.0071		
								1826	12.273	0.0080		
								1828	12.453	0.0085		
								1832	12.642	0.0094		
								1840	12.453	0.0113		
								1844	11.769	0.0122		
								1855	10.940	0.0145		
								1904	10.697	0.0163		

NOTES: To convert CFS to IN/HR, multiply by 0.0011105.

1971 SELECTED RUNOFF EVENT				BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF SEPTEMBER 11 - 12, 1971 (CONTINUED)											
							9-11				
							1908		10.751	0.0171	
							1920		11.057	0.0195	
							1927		10.976	0.0209	
							1940		10.013	0.0234	
							1951		6.923	0.0253	
							2002		7.708	0.0270	
							2004		7.636	0.0273	
							2012		6.231	0.0283	
							2022		5.241	0.0293	
							2032		4.385	0.0302	
							2050		3.314	0.0315	
							2104		2.791	0.0323	
							2119		2.413	0.0330	
							2138		2.224	0.0338	
							2216		1.927	0.0353	
							2236		1.954	0.0360	
							2252		2.080	0.0366	
							2300		2.179	0.0369	
							2336		2.368	0.0384	
							2400		2.359	0.0395	
							9-12				
							16		2.350	0.0402	
							44		2.282	0.0414	
							132		1.927	0.0433	
							220		1.729	0.0449	
							320		1.630	0.0468	

NOTES: To convert CFS to IN/HR, multiply by 0.0011105.



EVENT OF SEPTEMBER 11 - 12, 1971  
BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)

## BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)

LOCATION: Halifax County, Va., 3.5 mi. SW of Tuberville, Va., Winns Creek, Dan River.

AREA: 1471.00 acres 2.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSBURG, VIRGINIA				LITTLE WINNS CREEK WATERSHED (13010)						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	1.67	4.63	3.28	2.68	7.21	2.48	2.52	7.34	4.84	6.66	2.90	0.98	47.19										
Q	0.624	1.470	1.028	0.811	1.340	0.476	0.308	0.951	0.841	1.580	0.801	0.698	10.79										
STA AV P	2.91	3.36	3.35	2.82	3.78	3.05	3.08	4.37	2.84	3.21	2.54	3.03	39.16										
Q	0.895	1.202	1.241	0.929	0.838	0.556	0.433	0.550	0.376	0.637	0.514	0.550	8.720										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days						
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.					
1971	8-27	0.112	8-27	0.096	8-27	0.173	8-27	0.333	8-27	0.519	8-27	0.588	2-7	0.660	2-6	0.969							
MAXIMUMS FOR PERIOD OF RECORD																							
	10-10	1.120	10-10	0.710	10-10	1.030	10-10	1.410	10-10	1.510	10-10	1.580	10-10	1.620	10-10	1.910							
	1959		1959		1959		1959		1959		1959		1959		1959								

NOTES: Watershed conditions: Farm woods, mixture of hardwoods and conifers, with pine predominating, 58%; cultivated, 18%; pasture, native grass mixture, usually fair cover, 8%; idle, 16%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.010-5. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.10-8. Precipitation: Thiessen weighted from R-1, R-2, and R-3. Station averages determined from continuous records from Jan. 1958 through 1971. For long-time precipitation records, see National Weather Service records at Halifax (1 mile W), Virginia.

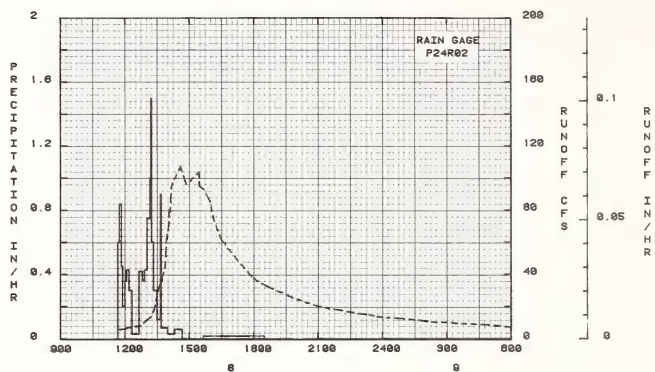
1971 DAILY PRECIPITATION (inches)													BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.1115	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	1.33	0.0	0.0													
2	0.0	0.0	0.37	0.35	0.15	0.0	0.0	0.0	0.0	0.12	0.22	0.0													
3	0.0	0.085	1.30	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.28	0.105													
4	0.19	0.618	0.01	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
5	0.28	0.42	0.0	0.01	0.0	0.0	0.0	0.06	0.0	0.05	0.0	0.0													
6	0.0	0.06	0.0	1.31	0.04	0.0	0.25	0.0	0.24	0.10	0.0	0.0													
7	0.0	0.89	0.04	0.13	0.38	0.0	0.06	0.0	0.0	0.0	0.20	0.43													
8	0.0	0.83	0.0	0.0	0.19	0.34	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.378	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.55	0.03	0.0													
10	0.0	0.0	0.07	0.0	0.0	0.0	0.05	0.0	0.17	1.33	0.01	0.0													
11	0.0	0.0	0.04	0.0	0.0	0.0	0.20	0.41	1.21	0.0	0.0	0.0													
12	0.0	0.12	0.0	0.0	0.66	0.18	0.0	0.00	2.02	0.0	0.0	0.05													
13	0.0	0.61	0.0	0.0	1.36	0.0	0.0	0.0	0.01	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.02	0.0	1.07	0.05	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.49	0.42	0.02	0.0	0.0	0.17	0.0	0.20													
17	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.01	0.0	0.02													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.00	0.37	0.0	0.0	0.01													
19	0.0	0.0	0.33	0.0	0.0	0.0	0.06	0.0	0.0	0.03	0.0	0.0													
20	0.0	0.04	0.0	0.0	0.01	0.0	0.0	0.0	0.04	0.10	0.0	0.17													
21	0.0	0.0	0.0	0.06	0.09	0.0	0.0	0.0	0.0	0.02	0.0	0.0													
22	0.09	0.75	0.01	0.01	0.0	0.0	0.0	0.47	0.51	0.37	0.0	0.0													
23	0.16	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	1.65	0.0	0.0													
24	0.29	0.0	0.0	0.01	0.0	0.0	0.29	0.0	0.0	0.58	1.658	0.0													
25	0.0	0.0	0.0	0.0	0.12	0.0	0.01	0.0	0.0	0.19	0.0	0.0													
26	0.03	0.19	0.775	0.0	0.0	0.0	0.03	0.0	0.0	0.05	0.0	0.0													
27	0.0	0.0	0.0	0.07	0.12	0.0	0.0	3.94	0.0	0.0	0.318	0.0													
28	0.0	0.0	0.01	0.55	1.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.30	0.0	0.77	1.27	0.73	0.0	0.0	0.0	0.20	0.0													
30	0.13	0.0	0.0	0.0	0.20	0.20	0.13	0.0	0.28	0.0	0.0	0.0													
31	0.03	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.67	4.63	3.28	2.68	7.21	2.48	2.52	7.34	4.84	6.66	2.90	0.98													
STA AV	2.91	3.36	3.35	2.82	3.78	3.05	3.08	4.37	2.84	3.21	2.54	3.03													

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period January 1958 through 1971.



1971 SELECTED RUNOFF EVENT											
BLACKSBURG, VIRGINIA LITTLE WINGS CREEK WATERSHED (13010)											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 8 - 9, 1971 (CONTINUED)											
							2- 8	1527	103.546	0.1212	
								1529	94.780	0.1234	
								1542	92.570	0.1371	
								1559	85.198	0.1541	
								1606	75.928	0.1604	
								1620	67.162	0.1717	
								1628	62.015	0.1775	
								1636	59.968	0.1830	
								1640	59.479	0.1857	
								1641	58.337	0.1864	
								1716	48.503	0.2074	
								1755	38.654	0.2265	
								1800	37.393	0.2286	
								1812	35.613	0.2335	
								1832	33.180	0.2412	
								1854	30.792	0.2491	
								1910	29.131	0.2545	
								1920	28.568	0.2577	
								1936	26.891	0.2627	
								1950	25.334	0.2668	
								2004	24.370	0.2707	
								2012	23.821	0.2729	
								2026	22.353	0.2765	
								2036	21.908	0.2790	
								2056	20.484	0.2838	
								2124	19.119	0.2900	
								2132	18.674	0.2917	
								2208	17.413	0.2990	
								2224	16.568	0.3021	
								2240	16.167	0.3050	
								2254	15.396	0.3075	
								2314	15.025	0.3109	
								2324	14.610	0.3126	
								2336	14.195	0.3145	
								2346	13.483	0.3161	
							2- 9	2400	13.186	0.3182	
								14	12.860	0.3202	
								20	12.860	0.3211	
								40	12.519	0.3240	
								102	12.192	0.3271	
								115	11.866	0.3289	
								128	11.555	0.3306	
								148	11.213	0.3332	
								206	10.590	0.3354	
								318	9.641	0.3436	
								328	9.359	0.3447	
								445	8.544	0.3524	
								516	8.010	0.3553	
								702	7.045	0.3643	
								708	7.045	0.3648	

NOTES: To convert CFS to I<sub>8</sub>/HR, multiply by 0.0006741.



EVENT OF FEBRUARY 8 - 9, 1971  
BLACKSBURG, VIRGINIA LITTLE WINES CREEK WATERSHED (13010)

## BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

LOCATION: Brunswick County, Va., on Route No. 58, 4 mi. W. of Lawrenceville, Va., Meherin River.

AREA: 555.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
P	1.92	5.25	3.08	1.95	7.24	1.93	3.27	4.14	4.46	7.62	2.69	1.32	44.87														
1971 Q	0.855	1.425	1.071	0.907	1.213	0.588	0.213	0.242	0.265	2.214	0.672	0.762	10.425														
STA AV	2.76	3.56	3.26	2.38	3.67	4.04	4.49	4.09	2.84	3.04	2.51	2.94	39.58														
Q	0.867	1.205	1.305	0.909	0.846	0.607	0.537	0.389	0.271	0.476	0.484	0.729	8.623														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge				1 Hour				2 Hours				Maximum Volume for Selected Time Interval				1 Day				2 Days				8 Days			
Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	10-23	0.183	10-23	0.178	10-23	0.334	10-23	0.699	10-23	1.008	10-23	1.333	10-23	1.493	10-23	1.723											
MAXIMUMS FOR PERIOD OF RECORD																											
7-23	0.661	7-23	0.491	7-23	0.877	7-23	1.405	7-23	1.521	7-23	1.595	5-5	2.090	4-30	2.860												
1970		1970		1970		1970		1970		1970		1970		1958		1958											

NOTES: Watershed conditions: mixed cover, face woods, mixture of hardwoods and conifers, 57%; permanent pasture, usually a good cover of native grass and clover mixture, 13%; alfalfa and other hay crops, 5%; cultivated, 9%; roads, 1%; idle, 15%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from April 1958 through 1971. For long-time precipitation records, see National Weather Service records at Emporia (1 mile WNW), Virginia.

1971 DAILY PRECIPITATION (inches)													BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.89	0.0	0.0													
2	0.0	0.0	0.21	0.07	0.20	0.0	0.0	0.0	0.0	0.32	0.0	0.0													
3	0.0	0.27	1.21	0.0	0.29	0.0	0.0	0.0	0.0	0.55	0.025														
4	0.04	0.83E	0.02	0.0	0.0	0.0	0.0	1.28	0.03	0.0	0.0	0.0													
5	0.30	0.66E	0.0	0.07	0.0	0.0	0.0	0.22	0.37	0.79	0.0	0.0													
6	0.0	0.01E	0.0	1.21	0.0	0.0	0.12	0.21	0.47	0.15	0.0	0.0													
7	0.0	1.1E	0.0	0.09	0.19	0.0	0.01	0.0	0.0	0.0	0.0	0.34													
8	0.47	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04	0.0													
10	0.12	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.24	0.73	0.01	0.0													
11	0.0	0.02	0.03	0.0	0.0	0.0	0.13	0.09	0.12	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.09E	0.31	0.0	0.0	0.95E	0.0	0.0	0.17													
13	0.02	0.95E	0.0	0.0	0.88E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.05	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.01	0.0	0.26	0.0	0.71	0.04	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.76	0.60	0.0	0.0	0.0	0.0	0.0	0.17													
17	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.02													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.04	0.0	0.0	0.0													
19	0.0	0.0	0.14	0.0	0.0	0.0	0.63	0.0	0.0	0.01	0.0	0.00													
20	0.0	0.01	0.0	0.0	0.09	0.0	0.0	0.0	0.05	0.0	0.0	0.56													
21	0.0	0.0	0.0	0.03	0.0	0.67E	0.0	0.0	0.41	0.0	0.0	0.0													
22	0.14	0.58	0.0	0.0	0.0	0.02E	0.0	0.10	0.54	0.37	0.0	0.0													
23	0.24	0.0	0.01	0.23	0.0	0.17E	0.0	0.0	0.0	3.85	0.0	0.0													
24	0.29	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.10	1.55E	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.16	0.0	0.0													
26	0.02	0.26	0.72E	0.0	0.0	0.0	0.03	0.09	0.0	0.02	0.0	0.0													
27	0.0	0.02	0.0	0.0	0.03	0.0	0.77	1.68E	0.0	0.0	0.52	0.0													
28	0.0	0.0	0.0	0.22	1.57	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.42	0.0	0.0	1.16	0.0	0.15	0.0	0.0	0.0	0.02	0.0													
30	0.10	0.0	0.0	0.0	0.98	0.0	0.29	0.0	1.29	0.0	0.0	0.03													
31	0.14	0.0	0.0	0.0	0.09	0.33	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.92	5.25	3.08	1.95	7.24	1.93	3.27	4.14	4.46	7.62	2.69	1.32													
STA AV	2.76	3.56	3.26	2.38	3.67	4.04	4.49	4.09	2.84	3.04	2.51	2.94													

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period April 1958 through 1971.

1971 MEAN DAILY DISCHARGE (cfs) BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.3648	0.318	0.521	0.693	0.405	2.211	0.189	0.193	0.146	1.2758	0.481	0.532
2	1.0248	0.293	0.574	0.671	0.382	1.855	0.177	0.190	0.146	0.905	0.459	0.608
3	0.7978	0.297	3.088	0.665	0.468	0.848	0.165	0.190	0.143	0.495	0.825	0.599
4	0.5348	0.683	2.563	0.585	0.399	0.745	0.158	0.369	0.139	0.357	0.593	0.562
5	0.8448	2.0392	1.228	0.560	0.363	0.653	0.158	0.459	0.161	0.526	0.481	0.548
6	0.7928	1.1058	0.945	2.692	0.351	0.490	0.170	0.266	0.278	0.859	0.459	0.548
7	0.6248	7.2658	0.831	2.053	0.378	0.165	0.193	0.150	0.444	0.448	0.448	0.721
8	0.4848	4.5858	0.710	1.228	0.336	0.355	0.147	0.162	0.142	0.337	0.408	0.445
9	0.8468	1.6812	0.631	0.915	0.328	0.322	0.145	0.153	0.134	0.309	0.407	0.599
10	1.1638	0.6938	0.599	0.761	0.321	0.308	0.145	0.152	0.134	0.940	0.400	0.560
11	1.3268	0.4758	0.583	0.677	0.300	0.291	0.147	0.162	0.192	0.613	0.394	0.548
12	1.3078	0.4368	0.548	0.649	0.306	0.328	0.147	0.158	0.610	0.418	0.375	0.565
13	1.2828	1.7818	0.548	0.624	0.609	0.311	0.148	0.142	0.290	0.350	0.375	0.592
14	1.1548	1.4418	0.516	0.573	0.406	0.299	0.124	0.133	0.205	0.325	0.375	0.548
15	0.7418	1.1088	0.587	0.548	0.390	0.286	0.122	0.131	0.182	0.297	0.375	0.548
16	0.5292	1.0318	0.559	0.548	2.372	0.7228	0.116	0.131	0.172	0.274	0.375	0.559
17	0.4398	0.8988	0.496	0.5348	0.797	0.332	0.112	0.142	0.172	0.268	0.375	0.605
18	0.3648	0.6752	0.457	0.4988	0.513	0.287	0.100	0.192	0.169	0.261	0.375	0.5018
19	0.2888	0.613	0.515	0.4988	0.410	0.282	0.213	0.154	0.1582	0.261	0.375	0.4982
20	0.274	0.599	0.486	0.4988	0.351	0.253	0.147	0.134	0.1463	0.262	0.358	0.8912
21	0.274	0.558	0.459	0.4988	0.348	0.296	0.132	0.128	0.2998	0.261	0.315	0.7248
22	0.281	0.797	0.459	0.4988	0.3162	0.375	0.126	0.128	0.3283	0.272	0.246	0.5482
23	0.381	0.863	0.445	0.5662	0.3088	0.310	0.126	0.121	0.2698	29.5388	0.246	0.5488
24	0.387	0.639	0.420	0.5128	0.3082	0.285	0.168	0.106	0.1902	5.254	1.199	0.4488
25	0.438	0.569	0.420	0.446	0.3082	0.249	0.206	0.101	0.1822	2.043	1.171	0.548
26	0.384	0.554	0.470	0.420	0.3082	0.237	0.153	0.110	0.1592	1.238	0.606	0.548
27	0.336	0.714	0.605	0.420	0.3082	0.213	0.306	0.480	0.1462	0.891	1.176	0.548
28	0.312	0.567	1.067	0.463	1.1298	0.209	0.216	0.191	0.1462	0.690	0.827	0.536
29	0.308	1.643	0.427	0.4262	0.192	0.174	0.141	0.141	0.1462	0.628	0.646	0.498
30	0.333	1.179	0.420	0.3128	0.151	0.184	0.159	0.3578	0.581	0.517	0.498	
31	0.360	0.828		0.4053		0.197	0.162		0.564		0.468	
MEAN	0.6429	1.1867	0.8059	0.7047	0.9122	0.4570	0.1602	0.1817	0.2057	1.6650	0.5221	0.5735
INCHES	0.855	1.425	1.071	0.907	1.213	0.588	0.213	0.242	0.265	2.214	0.672	0.762
STA A V	0.867	1.205	1.305	0.909	0.846	0.607	0.537	0.389	0.271	0.476	0.484	0.729

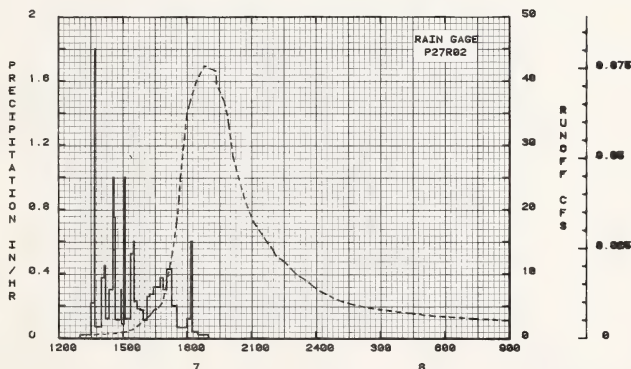
NOTES: To convert CFS to IN/DAY, multiply by 0.042866. STA A V based on record period April 1958 through 1971.

1971 SELECTED RUNOFF EVENT BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 7 - 8, 1971											
EG P27802			EG P27802								
2- 7	0.0	0.016	2- 7	1300	0.0	0.0	2- 7	1330	0.504	0.0	
				1330	0.0200	0.01		1352	0.560	0.0002	
				1341	0.2182	0.05		1406	0.554	0.0004	
				1342	1.7999	0.08		1436	0.677	0.0009	
				1400	0.0667	0.10		1442	0.733	0.0010	
WATERSHED CONDITIONS:											
Mixed cover, farm woods,			1408	0.3750	0.15		1510	0.935	0.0017		
mixture of hardwoods and			1412	0.4500	0.18		1519	1.142	0.0020		
conifers, 57%; permanent			1422	0.1200	0.20		1529	1.315	0.0024		
pasture, usually a good			1432	0.3000	0.25		1540	1.774	0.0029		
cover of native grass and			1435	1.0000	0.30		1617	3.554	0.0058		
clover mixture, 13%; alfalfa			1439	0.7500	0.35		1620	3.738	0.0061		
and other hay crops, 5%;			1455	0.1125	0.38		1627	4.287	0.0069		
cultivated, 9%; roads, 1%;			1457	0.3000	0.39		1630	4.460	0.0073		
idle, 15%.			1504	0.0857	0.40		1634	4.438	0.0078		
			1507	1.0000	0.45		1640	4.706	0.0086		
			1522	0.1200	0.48		1650	5.440	0.0101		
			1530	0.5250	0.55		1702	7.913	0.0125		
			1532	0.6000	0.57		1704	8.814	0.0130		
			1540	0.2250	0.60		1720	13.459	0.0163		
			1550	0.1800	0.63		1730	17.679	0.0229		
			1557	0.1714	0.65		1732	18.787	0.0240		
			1608	0.1091	0.67		1734	19.363	0.0251		
			1615	0.2571	0.70		1737	21.811	0.0269		
			1626	0.2727	0.75		1741	24.814	0.0297		
			1645	0.3158	0.85		1749	29.336	0.0362		
			1653	0.3750	0.90		1752	30.992	0.0389		
			1703	0.3000	0.95		1800	35.010	0.0468		
			1710	0.4286	1.00		1810	37.142	0.0575		
			1717	0.4286	1.05		1827	40.097	0.0771		
			1732	0.2000	1.10		1848	42.319	0.1029		

NOTES: To convert CFS to IN/HR, multiply by 0.0017469.

1971 SELECTED RUNOFF EVENT				BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF FEBRUARY 7 - 8, 1971 (CONTINUED)									
2- 7			1800		0.0643	1.13	2- 7	1852	42.263
			1810		0.1200	1.15		1920	41.485
			1814		0.6000	1.19		1922	39.521
			1830		0.0375	1.20		1943	36.857
			1900		0.0200	1.21		1952	34.452
								1956	33.225
								2008	28.172
								2040	21.641
								2106	17.982
								2113	17.382
								2146	14.701
								2200	13.672
								2208	12.754
								2220	12.312
								2241	11.377
								2304	9.967
								2330	9.027
								2400	7.484
							2- 8	12	7.247
								28	6.799
								80	6.492
								88	6.195
								100	5.910
								116	5.613
								148	5.087
								228	4.639
								256	4.415
								304	4.415
								424	3.822
								520	3.464
								720	2.989
								920	2.697

NOTES: To convert CFS to IN/HR, multiply by 0.0017869.



EVENT OF FEBRUARY 7 - 8, 1971  
BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

## BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

LOCATION: Bedford County, Va., on Route No. 460, about 6 mi. west of Forest, Va., near Goode, Va., Elk Creek, Big Otter River.

AREA: 1058.00 acres 1.65 sq. miles

HOURLY PRECIPITATION AND RUNOFF (inches)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1971	P 1.57	4.83	2.68	2.05	7.91	2.85	3.88	3.30	5.45	5.09	2.33	1.21
	Q 0.659	1.595	0.858	0.659	1.207	0.480	0.325	0.239	0.595	0.775	0.500	0.613
STA AV	P 2.33	3.45	3.32	2.31	3.56	2.65	3.52	3.86	3.25	3.28	2.89	3.00
	Q 0.866	1.246	1.270	0.745	0.527	0.369	0.244	0.471	0.258	0.467	0.538	0.685
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
	Discharge	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days				
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1971	9-12	0.291	9-12	0.155	9-12	0.201	5-30	0.270	5-30	0.385	5-29	0.455
											5-29	0.525
											2-6	0.842
MAXIMUMS FOR PERIOD OF RECORD												
	8-23	0.390	8-23	0.330	8-24	0.550	8-24	1.030	8-23	1.630	8-23	2.260
	1967		1967		1967		1967		1967		1967	
											8-22	2.420
											8-20	2.800

NOTES: Watershed conditions: mixed cover, cultivated, 30%; permanent pasture, usually a good cover of native grass mixture, 26%; farm woods, a mixture of hardwoods and pine, 37%; roads, 1%; idle, 6%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.015-4. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.15-5. Precipitation: Thiessen weighted from R-1, R-2 and R-3. STA AV determined from continuous records from September 1960 through 1971. For long-time precipitation records, see National Weather Service records at Bedford, Virginia.

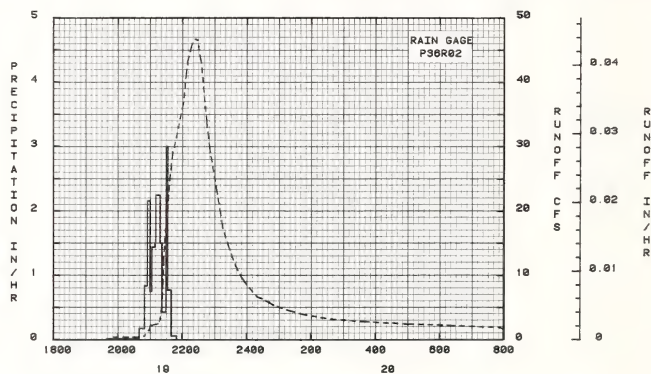
1971 DAILY PRECIPITATION (inches)												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.60	0.0	0.60	0.0
2	0.0	0.0	0.0	0.13	0.04	0.0	1.08	0.68	0.0	0.35	0.01	0.0
3	0.0	0.01	0.81	0.0	0.01	0.0	0.01	0.0	0.0	0.0	0.74	0.0
4	0.66E	0.005	0.01	0.0	0.0	0.0	0.01	0.0	0.03E	0.0	0.0	0.0
5	0.08E	0.61L	0.0	0.0	0.01	0.03	0.0	0.11E	0.0	0.40	0.0	0.0
6	0.0	0.58	0.0	1.08E	0.20	0.0	0.32E	0.09E	0.0	0.02	0.0	0.12E
7	0.0	0.46	0.0	0.47E	0.40	0.25	0.02E	0.12	0.0	0.0	0.0	0.66E
8	0.0	0.40	0.0	0.0	0.10	0.13	0.0	0.0	0.0	0.0	0.0	0.0
9	0.015	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.98E	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.47E	0.0	0.03
11	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.79	0.64	0.0	0.0	0.0
12	0.0	0.26E	0.0	0.0	0.41	0.38	0.11E	0.0	2.75	0.0	0.0	0.03
13	0.07	1.035	0.0	0.0	1.80	0.0	0.0	0.0	0.03	0.0	0.0	0.0
14	0.08	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0
15	0.02	0.0	0.40	0.0	0.65	0.52	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.44	0.53	0.02	0.0	0.09	0.10E	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.02E	0.0	0.02
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.03	0.0	0.0	0.0
19	0.0	0.0	0.48	0.0	0.0	0.0	0.05	0.03	1.48	0.0	0.07E	0.02
20	0.0	0.11	0.0	0.0	0.14	0.0	0.0	0.0	0.09	0.07E	0.0	0.31
21	0.0	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.03	0.01E	0.0	0.0
22	0.18	1.22	0.0	0.0	0.0	0.01	0.0	0.03	0.11	0.11E	0.0	0.0
23	0.19	0.0	0.0	0.09	0.0	0.07	0.0	0.0	0.05	1.48E	0.18E	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.14E	0.90E	0.0	0.0
25	0.22	0.0	0.0	0.0	0.01E	0.45	0.04E	0.0	0.0	0.33E	0.0	0.0
26	0.01	0.14	0.54E	0.0	0.0	0.0	0.08E	0.01	0.01	0.0	0.0	0.0
27	0.0	0.02	0.0	0.04	0.0	0.0	0.0	0.65	0.0	0.0	0.16E	0.0
28	0.0	0.0	0.24	0.88E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	1.66E	0.42	0.0	0.63E	0.0	0.0	0.29	0.0	0.0
30	0.04	0.0	0.0	1.06E	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.01E
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.39E	0.0	0.0	0.0	0.0	0.0
TOTAL	1.57	4.83	2.68	2.05	7.91	2.85	3.48	3.30	5.45	5.09	2.33	1.21
STA AV	2.33	3.45	3.32	2.31	3.56	2.65	3.52	3.86	3.25	3.28	2.89	3.00

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period September 1960 through 1971.



1971 SELECTED RUNOFF EVENT			BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 19 - 20, 1971 (CONTINUED)										
							9-19	2249	31.215	0.0488
								2252	29.039	0.0497
								2304	23.321	0.0547
								2312	19.245	0.0573
								2316	17.293	0.0584
								2326	14.658	0.0609
								2332	13.122	0.0622
								2340	11.447	0.0637
								2351	9.633	0.0655
								2400	8.577	0.0668
							9-20	20	6.614	0.0692
								28	6.433	0.0700
								36	5.996	0.0708
								50	5.387	0.0721
								122	4.449	0.0745
								144	3.969	0.0759
								238	3.158	0.0789
								340	2.795	0.0818
								500	2.432	0.0851
								512	2.432	0.0856
								620	2.187	0.0881
								752	1.942	0.0911
								1040	1.675	0.0958
								1200	1.590	0.0978
								1844	1.013	0.1060
								2100	0.949	0.1081

NOTES: To convert CFS to IN/HR, multiply by 0.0009374.



EVENT OF SEPTEMBER 19 - 20, 1971  
BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

## KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38

LOCATION: Northumberland County, Pennsylvania 6 miles northeast of Klingerstown, Pennsylvania: Mahantango Creek Watershed, Susquehanna River Basin.

AREA: 1773.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	1.97	4.21	2.15	0.84	3.93	1.59	5.52	3.18	3.84	2.47	3.80	2.53	36.04													
	Q	1.274	5.476	3.597	0.626	1.270	0.307	0.337	1.033	0.452	0.540	1.578	3.340	19.832													
STA AV	P	1.59	2.07	2.56	2.78	3.88	3.86	4.13	3.29	3.64	2.59	4.10	2.37	36.83													
	Q	0.996	3.077	2.624	2.020	1.456	0.795	0.452	0.542	0.520	0.308	1.718	1.864	16.372													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge			1 Hour			2 Hours			6 Hours			12 Hours			1 Day			2 Days			8 Days				
		Date	Rate	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.				
1971		2-13	0.125	2-13	0.120	2-13	0.226	2-13	0.581	2-13	0.994	2-13	1.372	2-13	1.660	2-20	2.725										
MAXIMUMS FOR PERIOD OF RECORD																											
		2-13	0.125	2-13	0.120	2-13	0.226	2-13	0.581	4-2	1.020	4-2	1.721	4-2	2.401	3-31	3.381										
1971		1971		1971		1971		1971		1970		1970		1970		1970											

NOTES: Watershed conditions: forested cover area, 4-yr rotation of corn, small grain, small grain and native grasses, most of which is heavily contoured. Vegetative cover: corn, 20.4%; small grain, 20.0%; pasture, 4.0%; hay, 12.9%; vegetables, 0.7%; idle, 0.6%; orchard, 0.5%; homesteads and roads, 3.1%; forest, 37.8%. Precipitation and runoff records began Jan. 1, 1968. Precipitation data Thiessen weighted average for rain gauges MB37 and MB37. Length of record 4 yr (1968-71). For long-time precipitation data records, see National Weather Service records at Sellersgrove, CAI Airport, Pennsylvania.

1971 DAILY AIR TEMPERATURE (degrees F)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	min	min	min	min	min	min	min	min	min	min	min	min		min	min	min	min	min	min	min	min	min	min	min	min
1	28	20	8	1	48	32	56	30	59	34	72	44	86	69	72	64	69	62	70	60	64	59	32	20	
2	32	14	10	0	36	30	54	31	51	44	65	55	79	60	78	67	70	62	74	64	78	51	28	15	
3	38	24	19	0	33	27	51	24	52	40	78	62	80	50	76	64	78	64	81	60	57	33	31	12	
4	44	30	26	16	26	21	48	28	58	38	84	60	80	54	67	60	82	62	60	57	46	28	35	16	
5	48	26	37	26	40	26	42	28	68	38	80	57	83	54	76	56	86	65	72	58	53	25	32	20	
6	25	17	30	40	26	48	26	41	30	54	41	80	59	86	63	77	51	86	66	50	57	31	42	30	
7	21	12	36	26	41	28	49	31	66	38	84	56	88	60	82	54	79	64	59	36	57	27	46	38	
8	22	10	34	30	28	22	49	29	53	48	86	62	91	60	84	60	82	66	59	34	36	26	40	37	
9	25	16	31	10	32	20	68	33	52	46	74	59	88	66	83	61	88	63	60	42	38	19	42	38	
10	39	15	23	4	38	18	50	35	69	42	76	56	81	62	82	63	82	68	57	48	40	31	50	42	
11	42	34	34	12	42	27	61	34	72	44	78	50	64	57	80	67	77	68	61	46	40	28	54	32	
12	40	17	47	32	41	26	70	34	64	58	82	60	77	54	73	54	77	67	58	36	53	29	54	32	
13	22	12	48	20	43	33	76	47	56	43	79	60	78	56	79	64	75	60	62	39	54	33	46	32	
14	33	22	24	16	54	38	57	33	67	36	68	58	77	62	81	54	75	60	72	52	45	28	34	25	
15	38	21	29	17	56	40	50	29	62	40	57	53	80	52	77	56	79	63	70	44	50	36	57	35	
16	23	14	32	22	58	31	59	34	56	48	67	52	82	61	75	57	72	58	64	47	52	36	54	40	
17	23	11	32	20	54	27	56	36	71	46	76	52	84	62	80	73	58	65	48	54	38	41	28		
18	22	6	46	26	40	25	60	40	77	45	78	56	77	54	82	55	69	61	63	43	37	28	19		
19	16	3	42	35	34	32	67	42	85	56	78	56	76	59	80	65	68	60	70	38	50	42	32	16	
20	26	10	43	35	30	30	66	42	72	54	83	62	73	54	80	60	74	64	56	52	44	31	38	33	
21	36	12	41	32	38	30	68	42	64	49	80	64	80	50	82	64	64	68	68	49	40	33	44	33	
22	40	31	36	31	42	30	52	42	60	45	79	60	81	56	78	64	65	42	65	46	33	25	33	20	
23	39	23	37	30	38	25	59	32	67	42	83	58	82	62	73	56	62	58	64	56	33	20	32	15	
24	36	22	36	30	33	21	55	34	68	46	85	64	80	62	69	50	63	46	59	53	34	26	49	33	
25	40	29	42	35	37	20	48	34	74	54	86	62	82	65	78	47	63	38	62	57	34	31	40	32	
26	35	17	50	30	38	26	47	38	62	53	81	64	85	67	80	64	54	52	62	53	35	30	46	39	
27	16	6	36	40	46	25	58	35	62	42	85	63	77	58	67	62	60	54	66	52	38	32	51	44	
28	16	7	50	36	52	26	50	43	60	40	87	66	78	55	74	59	66	60	73	55	40	33	53	33	
29	31	6	45	37	47	42	70	46	76	64	80	66	78	58	76	58	76	62	72	48	40	32	37	24	
30	38	16	40	30	52	40	62	55	66	48	76	60	80	57	72	62	71	48	37	30	46	29			
31	15	3																							
AV.	30	16	23	41	28	56	35	64	45	78	59	80	59	77	58	73	59	65	49	46	32	42	29		
MEAN	23.4	29.0	34.4	45.4	54.8	64.6	69.8	67.9	66.2	64.8	57.3	39.2	35.2												
STA AV	29	16	34	20	43	28	59	39	66	48	77	58	81	61	79	59	74	55	62	46	48	34	36	25	

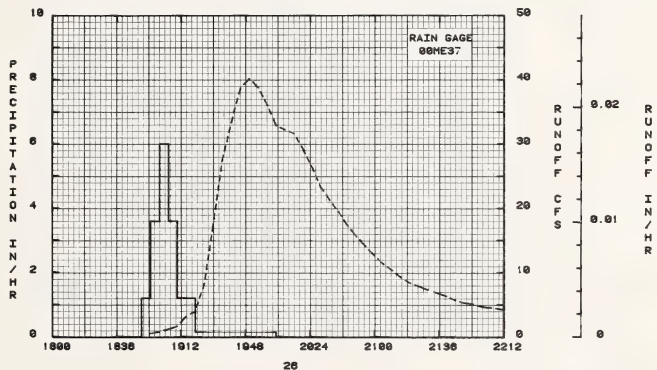
NOTES: Temperature data taken daily with maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 0930 for the data shown to 0930 the following day. Data recorded at MB37 meteorological station. STA AV based on 4 yr (1968-71) record period.

Cooperative Research Project with USDA, Soil Conservation Service, The Pennsylvania State University Agricultural Experiment Station, and the Institute for Research on Land and Water Resources of the Pennsylvania State University



1971 SELECTED RUNOFF EVENT				KLINGHERSTOWN, PENNSYLVANIA WATERSHED WE-38							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 26, 1971											
RG 00RE37			RG 00RE37								
7-26	0.0	0.002	7-26	1850	0.6	0.0	7-26	1855	0.469	0.0	
				1855	1.2001	0.10		1900	0.731	0.0	
				1900	3.5994	0.40		1905	1.180	0.0	
				1905	6.0004	0.90		1910	1.616	0.0001	
				1910	3.6003	1.20		1915	3.154	0.0002	
WATERSHED CONDITIONS:											
Mixed cover area, 4-yr											
rotation of corn, small grain,											
small grain and native											
grasses, most of which is											
heavily contoured. Vegetative											
cover: corn, 20.4%; small											
grain, 20.0%; pasture, 4.0%;											
hay, 12.9%; vegetables, 0.7%;											
idle, 0.5%; orchard, 0.5%;											
homesteads and roads, 3.1%;											
forest, 37.8%.											
				1915	1.1999	1.30		1920	3.942	0.0004	
				1920	1.2800	1.40		1925	8.304	0.0007	
				2005	0.1333	1.50		1930	17.654	0.0013	
				2105	0.0	1.50		1935	27.507	0.0023	
								1940	33.470	0.0037	
								1945	38.744	0.0054	
								1950	40.166	0.0072	
								1955	38.744	0.0090	
								2000	36.051	0.0108	
								2005	32.834	0.0124	
								2010	32.198	0.0139	
								2015	31.598	0.0154	
								2020	29.199	0.0166	
								2025	26.379	0.0181	
								2030	23.237	0.0193	
								2035	21.255	0.0203	
								2040	19.406	0.0212	
								2045	17.224	0.0221	
								2050	15.597	0.0229	
								2055	14.045	0.0236	
								2100	12.608	0.0242	
								2105	11.265	0.0247	

NOTES: To convert runoff in CFS to I#/HR, multiply by 0.000559.



EVENT OF JULY 26, 1971  
KLINGHERSTOWN, PENNSYLVANIA WATERSHED WE-38

## MCCREDIE, MISSOURI STATION RESERVOIR W-1

LOCATION: Callaway County, Mo.; 1 mi. S.E. of McCredie; Crows Fork Creek, Auxvasse Watershed, Missouri River Basin.

AREA: 153.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														MCCREDIE, MISSOURI STATION RESERVOIR W-1																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1971	P	1.35	2.12	0.69	1.29	4.63	1.87	3.35	1.56	2.56	1.50	2.17	4.39	27.48																	
	Q	0.945	1.127	0.089	0.0	0.261	0.038	0.0	0.0	0.0	0.0	0.0	0.230	2.690																	
STA AV	P	1.43	1.58	2.57	3.70	4.33	4.61	3.60	2.81	3.88	3.61	1.93	1.73	35.76																	
	Q	0.532	0.668	1.064	1.128	0.916	1.047	0.526	0.130	0.548	1.110	0.382	0.351	8.403																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge													Maximum Volume for Selected Time Interval																		
1 Hour													6 Hours										1 Day		2 Days		8 Days				
Date		Date		Vol.		Date		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.					
1971	1- 3	0.183	1- 3	0.174	1- 3	0.316	1- 3	0.645	1- 3	0.812	1- 3	0.904	1- 2	0.936	1- 1	0.945															
MAXIMUMS FOR PERIOD OF RECORD																															
10-13		2.269		10-13		1.365		10-13		2.236		10- 4		3.960		10- 4		7.000		10- 4		7.775		10- 3		8.090		10- 2		8.840	
1968				1968				1968				1941				1941				1941				1941				1941			

NOTES: Watershed conditions: 40% Pasture and meadow; 51% corn; 30% soybeans; and 6% roads and farmsteads. Precipitation Thiessen average of 4 recording gauges and 1 non-recording gauge. Precipitation and runoff records began Jan. 1, 1941. Runoff amounts, or rates, which are reported as inches or inches per hour, respectively, were computed with a constant watershed area of 153 acres, including reservoir surface area. Previous published runoff amounts and rates were computed with a variable watershed area equal to the total area less the reservoir surface area, which was a function of reservoir stage. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 25-1-13. For long-time precipitation records, see National Weather Service records at Columbia, Missouri (1890-1971).

1971 DAILY AIR TEMPERATURE (degrees F)												MCCREDIE, MISSOURI STATION RESERVOIR W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	44	30	22	6	45	32	75	41	70	46	83	62	84	63	80	54	88	64	88	64	77	42	34	27
2	43	31	22	6	44	29	51	34	70	43	80	60	85	60	83	57	86	67	87	62	73	42	34	28
3	47	33	26	21	32	19	54	32	64	38	84	58	85	60	83	61	87	70	75	64	57	35	36	29
4	23	22	35	26	46	17	52	35	68	39	86	64	85	66	80	64	88	68	75	50	64	29	39	27
5	22	10	40	17	55	32	48	35	74	54	87	68	79	67	77	61	89	69	81	49	64	47	42	35
6	16	4	26	14	55	32	53	31	74	60	87	68	86	63	77	62	91	68	78	49	60	36	42	38
7	26	7	25	18	33	28	65	33	70	57	86	70	89	66	77	63	92	68	70	44	39	15	44	40
8	29	15	10	0	39	23	75	42	69	53	86	68	93	72	88	69	89	69	59	43	63	41	47	40
9	39	19	15	2	47	29	74	51	74	48	81	61	93	71	89	67	91	70	58	40	51	35	46	43
10	39	23	42	13	43	29	73	38	70	58	80	64	83	70	91	66	88	67	64	38	65	26	53	38
11	30	22	50	36	60	38	79	54	72	57	88	69	93	69	91	67	88	66	70	43	67	33	47	23
12	26	17	48	24	67	38	85	59	73	47	88	68	92	67	84	56	83	57	76	38	76	34	43	28
13	30	20	24	7	73	39	84	47	67	40	86	68	92	75	90	65	87	58	75	53	75	46	36	20
14	30	19	37	17	82	59	66	39	79	46	81	68	91	64	91	65	100	53	75	39	75	60	44	34
15	25	9	40	27	53	42	74	43	80	53	79	65	83	67	87	64	98	58	81	47	70	56	63	41
16	37	12	48	26	51	34	82	51	80	57	80	65	87	60	80	63	65	54	80	51	70	48	44	29
17	37	17	58	27	55	28	81	58	84	60	82	65	91	65	81	61	66	54	78	61	70	46	40	24
18	20	18	65	41	55	45	76	60	84	64	90	68	91	68	87	59	65	52	81	64	66	44	44	14
19	18	4	63	45	52	33	83	58	80	56	90	73	73	64	91	65	57	53	78	68	48	29	40	33
20	37	7	45	33	46	29	83	57	72	48	90	70	78	57	91	71	69	48	73	64	60	40	37	30
21	39	31	36	31	62	33	70	46	76	53	83	67	83	58	88	68	74	43	73	61	55	28	35	31
22	43	24	35	31	40	31	70	43	75	58	83	62	85	60	88	67	72	45	72	55	38	19	45	29
23	40	16	31	29	29	26	63	48	71	56	87	66	84	68	93	66	70	52	65	58	36	30	57	37
24	48	22	43	20	35	20	69	45	71	61	90	64	78	64	93	65	66	47	63	56	38	31	53	37
25	49	28	59	30	33	28	72	46	65	50	94	71	87	62	93	66	75	54	73	47	51	26	64	32
26	48	16	60	46	46	27	74	53	65	46	94	70	77	66	84	60	88	64	75	51	45	37	59	45
27	21	7	46	32	61	33	74	53	62	49	94	71	80	53	77	52	90	69	75	56	45	35	64	30
28	25	15	44	28	61	44	66	43	67	44	91	68	80	65	80	52	91	70	76	44	40	35	32	17
29	53	19	52	33	61	37	72	46	91	70	77	55	84	59	70	50	80	53	34	34	81	27		
30	52	18			68	29	65	38	75	50	89	71	70	54	84	56	90	66	82	58	33	28	56	31
31	19	11			76	50			88	64			74	50	86	54			79	34			44	22
AV.	34	18	39	23	52	32	70	45	73	52	86	67	84	64	85	62	82	60	75	52	56	36	45	31
MEAN	25.9	31.2			42.2	57.4	62.3		76.5	73.7			73.7		71.4		63.6		46.1				38.2	
STA AV	39	20	43	23	52	30	67	43	75	52	83	61	88	65	88	63	81	55	70	45	54	33	41	24

NOTES: Temperature data taken daily with the maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 1700 of the previous day to 1700 of the day on which values are recorded. STA AV based on 31 yr (1941-1971) record period.



## COSHOCTON, OHIO WATERSHED 102

LOCATION: Coshocton Co., Ohio; 10 mi. SE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 1.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 102																																																																																																		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																																																																																																		
1971	P 1.29	3.57	2.55	0.75	4.35	1.39	2.84	1.92	2.13	0.99	1.83	4.40	28.01																																																																																																		
	Q 0.0	0.624	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.624																																																																																																		
STA AV P	1.85	2.26	3.96	3.26	3.96	4.45	4.25	2.96	2.38	2.32	2.42	2.39	36.45																																																																																																		
	Q 0.046	0.087	0.112	0.060	0.009	0.149	0.173	0.033	0.016	0.009	0.001	0.0	0.694																																																																																																		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																																																																																															
MAXIMUM DISCHARGE														MAXIMUM VOLUMES FOR SELECTED TIME INTERVAL																																																																																																	
1 Hour														2 Hours														6 Hours														12 Hours														1 Day														2 Days														8 Days																											
Date Vol.														Date Vol.														Date Vol.														Date Vol.														Date Vol.														Date Vol.														Date Vol.																											
1971	2-5 0.087 2-5 0.075 2-5 0.114														2-4 0.267 2-4 0.428														2-4 0.554														2-3 0.554														1-28 0.554																																																						
MAXIMUMS FOR PERIOD OF RECORD																																																																																																															
6-12 3.640														6-12 1.310														7-5 1.427														7-5 2.470														7-5 2.470														7-5 2.470														7-5 2.470														6-29 2.597													
1957														1957														1969														1969														1969														1969														1969														1969													

NOTES: Watershed conditions: Cover of improved practice alfalfa meadow. For map of watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26, 1-1. For Geology description and map, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26, 1-1 and 26, 10-3. Precipitation data from rain gage T101. Precipitation and runoff records began April 1957. Watershed discontinued Jan. 1, 1957 to Apr. 30, 1957 and Sept. 1, 1957 to March 29, 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971 DAILY PRECIPITATION (inches)						COSHOCTON, OHIO WATERSHED 102							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.05	0.0	0.09	0.05	0.0	0.0	0.07	0.0	0.25	0.0
3	0.11	0.0	0.305	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0
4	0.70	0.40	0.305	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0
5	0.0	0.23	0.0	0.0	0.0	1.25	0.0	0.0	0.01E	0.0	0.0	0.0	0.52
6	0.0	0.0	0.55	0.0	1.55	0.35	0.0	0.0	0.0	0.07	0.0	0.12M	0.52
7	0.0	0.0	0.09M	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.12M	0.52
8	0.0	1.325	0.09M	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.36	0.07M	0.0
10	0.0	0.0	0.195	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0
11	0.0	0.0	0.105	0.0	0.07	0.0	1.20	0.09	0.0	0.0	0.0	0.0	0.0
12	0.0	0.34M	0.39	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.10	0.0	0.0	0.20	0.0	0.66	0.0	0.0	1.27	0.0	0.0	0.0	0.05
14	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.55	0.0
15	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32
16	0.045	0.0	0.025	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.055	0.15	0.015	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05M
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.05	0.135	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.33	0.0
20	0.0	0.15	0.105	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.13	0.15M
21	0.0	0.0	0.0	0.07	0.0	0.11	0.0	0.11	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0
23	0.0	0.065	0.055	0.0	0.0	0.0	0.0	0.26	0.0	0.07E	0.0	0.0	0.0
24	0.085	0.075	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.10E	0.135	0.0
25	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.31	0.10	0.0	0.0	0.0	0.0
26	0.015	0.0	0.0	0.0	0.0	0.0	0.14	0.21	0.14	0.0	0.0	0.0	0.31
27	0.015	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.15M	0.05E	0.0
28	0.015	0.0	0.0	0.03	0.0	0.04	0.09	0.0	0.0	0.0	0.0	0.0	0.16
29	0.03M	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.53M	0.05E	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	1.15
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.29	3.57	2.55	0.75	4.35	1.39	2.84	1.92	2.13	0.99	1.83	4.40	
STA AV	1.85	2.26	3.96	3.26	3.96	4.45	4.25	2.96	2.38	2.32	2.42	2.39	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26, 035-1. Precipitation amounts are for rain gage T101. STA AV based on 23 yr period, part-year records included. Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.

1971 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 102												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.046	0.087	0.112	0.060	0.009	0.149	0.173	0.033	0.016	0.009	0.001	0.0

NOTES: To convert CFS to IN/DAY, multiply by 18.8902. STA AV based on 23 yr period, part-years records included.

## COSHOCTON, OHIO WATERSHED 129

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 2.71 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 129													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	1.43	3.44	2.47	0.57	4.38	1.16	2.90	1.75	2.26	0.96	1.70	4.19	27.21													
	Q	0.018	1.919	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.948													
STA AV	P	2.67	2.38	3.46	3.35	3.84	3.96	4.30	2.79	2.56	2.10	2.47	2.30	36.16													
	Q	0.091	0.164	0.158	0.058	0.045	0.134	0.126	0.037	0.036	0.010	0.001	0.011	0.870													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1971		2-19	0.086	2-19	0.086	2-19	0.166	2-19	0.456	2-19	0.609	2-19	0.833	2-18	1.142	2-14	1.422										
MAXIMUMS FOR PERIOD OF RECORD																											
		6-12	2.360	6-12	0.980	9-1	1.010	3-4	1.530	3-4	2.420	3-4	2.900	3-3	3.510	3-3	4.000										
		1957		1957		1950		1963		1963		1963		1963		1963											

NOTES: Watershed conditions: Cover of improved practice pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.3-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.3-1 and 26.30-3. Precipitation data from rain gage 100. Precipitation and runoff records began April, 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 129												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.08	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.02	0.06	0.05	0.0	0.0	0.09E	0.0	0.19	0.0													
3	0.12	0.0	0.305	0.0	0.0	0.05	0.0	0.0	0.07E	0.0	0.0	0.0													
4	0.82	0.35	0.305	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0													
5	0.0	0.20	0.0	0.0	1.25	0.0	0.0	0.01E	0.0	0.0	0.0	0.25													
6	0.0	0.0	0.65	0.0	1.66	0.29	0.0	0.0	0.06E	0.0	0.238	0.87													
7	0.0	0.0	0.05E	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.54													
8	0.0	1.325	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.33	0.068	0.0													
10	0.0	0.0	0.255	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.105	0.0	0.06	0.0	1.17	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.30E	0.35E	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.07	0.0	0.0	0.15	0.0	0.45	0.0	0.0	1.32	0.0	0.0	0.0													
14	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.60													
15	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35													
16	0.04E	0.0	0.015	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.05E	0.06	0.015	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.02	0.15E	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.35	0.0													
20	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.07	0.10E													
21	0.0	0.0	0.0	0.05	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0													
23	0.0	0.04E	0.105	0.0	0.0	0.0	0.0	0.28	0.0	0.08	0.0	0.0													
24	0.09E	0.05E	0.0	0.0	0.0	0.65	0.0	0.0	0.11	0.12E	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.25	0.10	0.0	0.0	0.0													
26	0.015	0.0	0.0	0.0	0.0	0.0	0.16	0.24	0.17	0.0	0.0	0.25													
27	0.015	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.05E													
28	0.015	0.0	0.0	0.02E	0.0	0.15	0.07	0.0	0.0	0.0	0.0	0.13													
29	0.09E	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.53E	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	1.00	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.43	3.44	2.47	0.57	4.38	1.16	2.90	1.75	2.26	0.96	1.70	4.19													
STA AV	2.67	2.38	3.46	3.35	3.84	3.96	4.30	2.79	2.56	2.10	2.47	2.30													

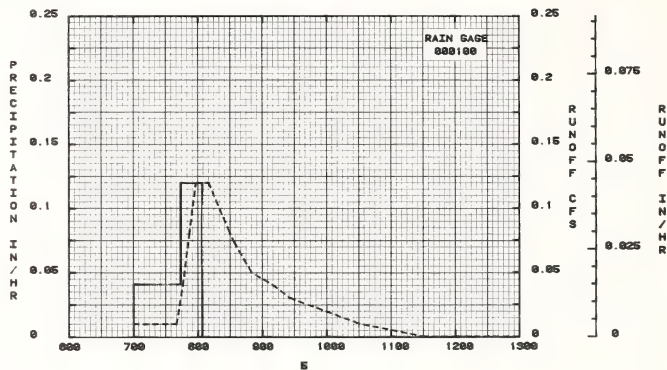
NOTES: For daily air temperatures in the vicinity, see table for Watershed #95, p. 26.035-1. Precipitation amounts are for rain gage 100. STA AV based on 34 yr period, part-year records included. Codes \*E\* may reflect estimated storm duration rather than estimated rainfall amounts.

1971 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 129												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.002	0.0268	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.054	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0078	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.018	1.919	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.091	0.164	0.158	0.058	0.045	0.134	0.126	0.037	0.036	0.010	0.001	0.011

NOTES: To convert CFS to IN/DAY, multiply by 8.7829. STA AV based on 34 yr period, part-year records included.

1971 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 129												
ATTCHEMENT CONDITIONS				RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF FEBRUARY 5, 1971												
2- 5	EG 000100		2- 5	EG 000100			2- 5	700	0.012	0.0		
	0.10	0.209		700	0.0	0.0		740	0.012	0.0029		
				744	0.0409	0.03		746	0.041	0.0039		
				804	0.1200	0.07		752	0.082	0.0061		
								758	0.118	0.0098		
WATERSHED CONDITIONS:										810	0.118	0.0184
Mixed grass.										830	0.082	0.0306
										836	0.067	0.0333
										850	0.053	0.0384
										910	0.041	0.0441
										926	0.030	0.0476
										1030	0.006	0.0546
										1130	0.002	0.0561
										1200	0.0	0.0563
										1310	0.0	0.0563

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.



EVENT OF FEBRUARY 5, 1971  
COSHOCTON, OHIO WATERSHED 129

## COSHOCTON, OHIO WATERSHED 123

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 1.37 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 123													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
	P	1.46	3.55	2.39	0.75	4.48	1.35	2.81	1.74	2.26	0.97	1.77	4.28	27.01													
1971	Q	0.061	2.600	0.334	0.0	0.671	0.0	0.0	0.0	0.0	0.0	0.0	0.040	3.705													
STA AV	P	2.72	2.42	3.42	3.46	3.85	4.13	4.44	2.79	2.59	2.22	2.56	2.42	37.00													
	Q	0.372	0.396	0.426	0.269	0.137	0.265	0.213	0.071	0.045	0.016	0.010	0.115	2.334													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
Date		Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days																		
Date		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971		5-6	0.276	5-6	0.217	5-6	0.377	5-6	0.669	2-22	0.760	2-19	0.981	2-18	1.275	2-15	2.157										
MAXIMUMS FOR PERIOD OF RECORD																											
6-12		5.970	6-12	1.370	6-12	1.480	7-5	2.054	7-5	2.131	1-21	2.330	1-21	2.330	3-4	2.660											
1957			1957		1957		1969		1969		1959		1959		1964												

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Risc. Pub. 945, p. 26.10-6. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Risc. Pub. 1070, pp. 26.10-1 and 26.30-3. Precipitation data from rain gauge Y103. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

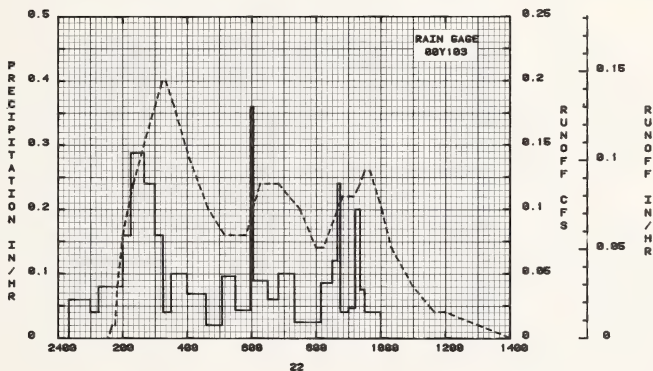
1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 123												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.10	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.05	0.09	0.06	0.0	0.0	0.09	0.0	0.0	0.0													
3	0.10	0.0	0.305	0.0	0.0	0.04	0.0	0.0	0.06	0.0	0.0	0.0													
4	0.82	0.45	0.305	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0													
5	0.0	0.20	0.0	0.0	1.25	0.0	0.0	0.01E	0.0	0.0	0.0	0.13													
6	0.0	0.0	0.55	0.0	1.68	0.32	0.0	0.0	0.06	0.0	0.23M	0.99													
7	0.0	0.0	0.05M	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.52													
8	0.0	1.32E	0.05M	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.35	0.06M	0.0													
10	0.0	0.0	0.195	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.105	0.0	0.09	0.0	1.18	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.25M	0.39	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.12	0.0	0.0	0.21	0.0	0.68	0.0	0.0	1.32	0.0	0.0	0.05E													
14	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.55													
15	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39													
16	0.04S	0.0	0.02S	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.05S	0.15	0.01S	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05M													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.05	0.16S	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.30	0.0													
20	0.0	0.10	0.05S	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.10	0.14M													
21	0.0	0.0	0.0	0.08	0.0	0.08	0.0	0.05	0.0	0.0	0.0	0.0													
22	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0													
23	0.0	0.04S	0.04M	0.0	0.0	0.0	0.0	0.27	0.0	0.07	0.0	0.0													
24	0.08S	0.04S	0.0	0.0	0.0	0.0	0.69	0.0	0.0	0.10	0.15S	0.0													
25	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.32	0.10	0.0	0.0	0.0													
26	0.01S	0.0	0.0	0.0	0.0	0.0	0.15	0.15	0.16	0.0	0.0	0.21													
27	0.01S	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.15M	0.05E	0.0													
28	0.01S	0.0	0.0	0.04	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.13													
29	0.09M	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.58M	0.05E													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	1.02	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.46	3.55	2.39	0.75	4.48	1.35	2.81	1.74	2.26	0.97	1.77	4.28													
STA AV	2.72	2.42	3.42	3.46	3.85	4.13	4.44	2.79	2.59	2.22	2.56	2.42													

NOTES: For daily air temperatures in the vicinity, see table for Watershed #95, p. 26.035-1. Precipitation amounts are for rain gauge Y103. STA AV based on 33 yr period. Codes "E" may reflect estimated storm duration rather than estimated rainfall amounts.



1971 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 123					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF FEBRUARY 22, 1971 (CONTINUED)											
							2-22	1100	0.041	0.7259	
								1140	0.025	0.7418	
								1200	0.020	0.7472	
								1300	0.009	0.7577	
								1400	0.004	0.7624	
								1500	0.0	0.7638	

NOTES: To convert runoff in CFS to in/hr, multiply by 0.72389455.



EVENT OF FEBRUARY 22, 1971  
COSHOCTON, OHIO WATERSHED 123

## COSHOCTON, OHIO WATERSHED 109

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 1.69 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 109												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	1.33	3.39	2.33	0.76	4.80	1.24	3.03	1.91	2.34	1.00	2.25	5.04	29.42												
Q	0.0	1.616	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.616												
STA AV P	2.61	2.29	3.36	3.41	3.87	4.12	4.47	2.74	2.62	2.16	2.47	2.32	36.46												
Q	0.068	0.190	0.123	0.044	0.097	0.249	0.286	0.142	0.045	0.010	0.001	0.016	1.270												

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													COSHOCTON, OHIO WATERSHED 109												
Maximum Discharge				Maximum Volume for Selected Time Interval																					
Date	Date	1 Hour	2 Hours	Date	Date	6 Hours	12 Hours	1 Day	2 Days	8 Days				Date	Date	1 Day	2 Days	Date	Date	1 Day	2 Days	Date	Date	1 Day	8 Days
1971	2-22	0.085	2-22	0.076	2-22	0.130	2-22	0.336	2-22	0.449	2-19	0.461	2-18	0.679	2-14	1.313									

MAXIMUMS FOR PERIOD OF RECORD													COSHOCTON, OHIO WATERSHED 109												
5-17	4.340	6-29	0.820	6-28	1.090	7-5	1.416	3-4	1.920	3-4	2.170	3-3	2.550	3-1	2.660										
1941		1941		1940		1969		1963		1963		1963		1963											

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Risc. Pub. 985, p. 26.13-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Risc. Pub. 1070, pp. 26.13-1 and 26.30-3. Precipitation data from rain gage Y102. Precipitation and runoff records began Nov. 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

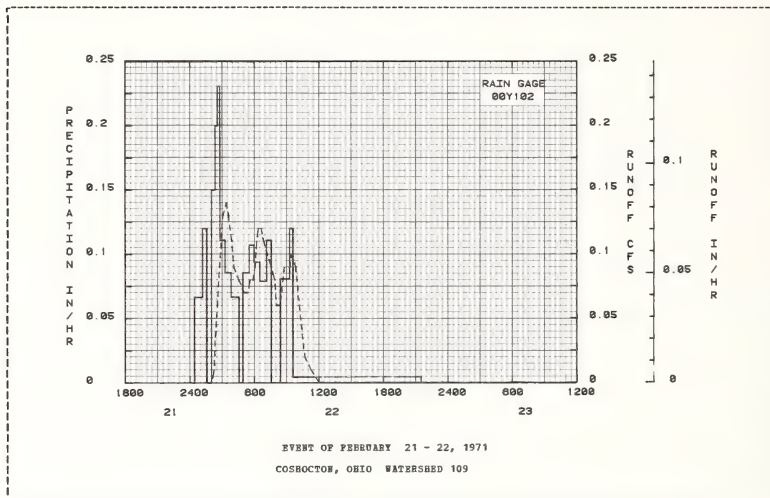
1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 109												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.10E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.05	0.10	0.05	0.0	0.0	0.15	0.0	0.22	0.0													
3	0.14	0.0	0.30S	0.0	0.0	0.05	0.0	0.0	0.10	0.0	0.0	0.0													
4	0.71	0.42	0.30S	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0													
5	0.0	0.24E	0.0	0.0	1.81	0.0	0.0	0.01E	0.0	0.0	0.0	0.15													
6	0.0	0.0	0.55	0.0	1.69	0.29	0.0	0.0	0.10E	0.0	0.28E	1.20													
7	0.0	0.0	0.05S	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.54E													
8	0.0	1.32S	0.05S	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.37E	0.06E	0.0													
10	0.0	0.0	0.17S	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.10S	0.0	0.12	0.0	1.30	0.09	0.0	0.0	0.0	0.0													
12	0.0	0.15E	0.38	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.11	0.0	0.0	0.18E	0.0	0.55	0.0	0.0	1.31	0.0	0.0	0.05													
14	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.60													
15	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35													
16	0.04S	0.0	0.02S	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.04S	0.15	0.01S	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.05	0.15S	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.37	0.0													
20	0.0	0.15	0.05S	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.12	0.15E													
21	0.0	0.0	0.0	0.08	0.0	0.07	0.0	0.05	0.0	0.0	0.0	0.0													
22	0.0	0.81E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0													
23	0.0	0.05S	0.06S	0.0	0.0	0.0	0.33	0.0	0.10	0.0	0.0	0.0													
24	0.09S	0.05S	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.07	0.12S	0.0													
25	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.32	0.10	0.0	0.0	0.0													
26	0.01S	0.0	0.0	0.0	0.0	0.0	0.16	0.18	0.15	0.0	0.0	0.45													
27	0.01S	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.11E													
28	0.01S	0.0	0.0	0.03	0.0	0.09	0.10	0.0	0.0	0.0	0.0	0.16													
29	0.05S	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.03E													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	1.20	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.33	3.39	2.33	0.76	4.80	1.24	3.03	1.91	2.34	1.00	2.25	5.04													
STA AV	2.61	2.29	3.36	3.41	3.87	4.12	4.47	2.74	2.62	2.16	2.47	2.32													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y102. STA AV based on 34 yr period, part-year records included. Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.



1971 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 109					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 21 - 22, 1971 (CONTINUED)											
							2-22	1040	0.023	0.4407	
								1114	0.007	0.4457	
								1200	0.004	0.4482	
								1220	0.002	0.4488	
								1300	0.0	0.4492	
								2400	0.0	0.4492	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.58682576.



## COSHOCTON, OHIO WATERSHED 106

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 1.56 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												COSHOCTON, OHIO WATERSHED 106											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971	P 1.52	3.38	2.26	0.72	4.28	1.10	2.96	1.96	2.07	1.03	1.75	4.45	27.44										
	Q 0.015	1.932	0.093	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.018	2.153										
STA AV	P 2.60	2.13	3.14	3.17	3.70	3.99	4.40	2.69	2.62	2.10	2.36	2.24	35.14										
	Q 0.228	0.271	0.113	0.128	0.116	0.277	0.300	0.195	0.150	0.017	0.028	0.076	1.900										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days			
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	2-22	0.075	2-22	0.070	2-12	0.137	2-12	0.382	2-12	0.587	2-12	0.739	2-11	0.739	2-11	0.739	2-11	0.739	2-12	1.310			
MAXIMUMS FOR PERIOD OF RECORD																							
	6-23	7.630	9-1	1.260	9-1	1.380	9-1	1.390	2-23	1.410	2-23	1.410	2-23	2.000	2-19	2.440							

NOTES: Watershed conditions: Cover of meadow, prevailing practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.20-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.20-1 and 26.30-3. Precipitation data from rain gage 115. Precipitation and runoff records began Apr. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

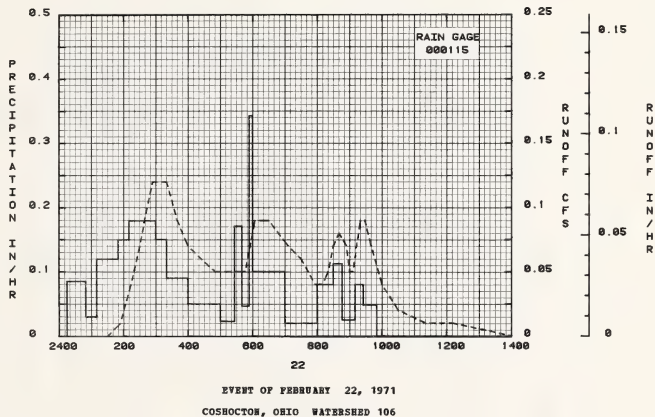
1971					COSHOCTON, OHIO WATERSHED 106																			
DAILY PRECIPITATION (inches)																								
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.16	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.01	0.07	0.08	0.0	0.0	0.07	0.0	0.21	0.0												
3	0.14	0.0	0.30S	0.0	0.0	0.05	0.0	0.04E	0.07	0.0	0.0	0.0												
4	0.06	0.40E	0.30S	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0												
5	0.0	0.25E	0.0	0.0	1.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.12												
6	0.0	0.0	0.60	0.0	1.59E	0.18	0.0	0.0	0.05E	0.0	0.25E	1.07												
7	0.0	0.0	0.05S	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.44												
8	0.0	1.32S	0.05S	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.39	0.07E	0.0												
10	0.0	0.0	0.15S	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.15S	0.0	0.10	0.0	1.05	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.15E	0.40	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.10	0.0	0.0	0.20	0.0	0.24	0.0	0.0	1.25	0.0	0.0	0.0												
14	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.65												
15	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34												
16	0.04S	0.0	0.01S	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.05S	0.16	0.01S	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.05	0.09E	0.0	0.0	0.0	0.0	0.44	0.0	0.30	0.0	0.0												
20	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.10	0.15E												
21	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.09	0.0	0.0	0.0	0.0												
22	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0												
23	0.0	0.04S	0.03S	0.0	0.0	0.0	0.0	0.40	0.09	0.0	0.0	0.0												
24	0.10S	0.05S	0.0	0.0	0.0	0.0	0.80	0.0	0.08	0.13E	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.71	0.07	0.0	0.0	0.0												
26	0.01S	0.0	0.0	0.0	0.0	0.0	0.40	0.08	0.12	0.0	0.0	0.25												
27	0.01S	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.05E												
28	0.01S	0.0	0.0	0.03	0.0	0.31	0.10	0.0	0.0	0.0	0.0	0.12												
29	0.05E	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.55E	0.04E	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	1.17	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	1.52	3.34	2.26	0.72	4.28	1.10	2.96	1.96	2.07	1.03	1.75	4.45												
STA AV	2.60	2.13	3.14	3.17	3.70	3.99	4.40	2.69	2.62	2.10	2.36	2.24												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 115. STA AV based on 33 yr period, part-year records included. Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.



1971 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 106					
APPROXIMATE CONDITIONS			RAINFALL						RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Date (cfs)	Acc. (inches)	
EVENT OF FEBRUARY 22, 1971 (CONTINUED)											
							2-22	1120	0.012	0.3780	
								1210	0.006	0.313788	
								1400	0.002	0.3835	
								1500	0.0	0.3841	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.63572791.



## COSHOCTON, OHIO WATERSHED 196

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 303.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												COSHOCTON, OHIO WATERSHED 196											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971	P 1.44	3.67	2.34	0.82	4.47	1.18	3.03	1.82	2.16	1.02	1.76	4.63	28.34										
	Q 0.959	2.846	2.445	0.360	1.926	0.120	0.091	0.050	0.056	0.045	0.067	0.494	9.460										
STA AV	P 2.66	2.40	3.49	3.36	3.81	4.20	4.39	2.70	2.64	2.19	2.48	2.38	36.69										
	Q 1.727	1.918	2.828	2.309	1.497	1.012	0.708	0.276	0.223	0.200	0.393	0.953	14.045										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
Date				1 Hour				2 Hours				6 Hours				1 Day				2 Days			
Date				Vol.				Date				Date				Date				Date			
1971	5-6	0.183	5-6	6	0.162	5-6	6	0.294	5-6	6	0.659	5-5	5	0.825	5-5	0.959	5-5	1.095	2-17	2.015			
MAXIMUMS FOR PERIOD OF RECORD																							
	6-12	3.720	6-12	1.310	6-12	1.480	7-5	2.106	7-5	2.453	1-21	2.920	1-20	3.210	3-4	4.630							
	1957		1957		1957		1969		1969		1959		1964										

NOTES: Watershed conditions: Woods, 27%; grassland, 50%; miscellaneous, 23%; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.30-3. For geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.30-1 and 26.30-3. Precipitation data from rain gage 108. Precipitation and runoff records began May 1937. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 196											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.19	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.0	0.06	0.05	0.05	0.0	0.0	0.10	0.0	0.19	0.0											
3	0.11	0.0	0.30S	0.0	0.0	0.0	0.05	0.0	0.0	0.06	0.0	0.0	0.0											
4	0.84	0.49	0.30S	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0											
5	0.0	0.23	0.0	0.0	1.27	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.12											
6	0.0	0.0	0.60	0.0	1.72	0.25	0.0	0.0	0.04	0.0	0.10	1.10												
7	0.0	0.0	0.02S	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.11	0.48												
8	0.0	1.32S	0.03S	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.40	0.06	0.0												
10	0.0	0.0	0.17S	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.10S	0.0	0.10	0.0	0.99	0.08	0.0	0.0	0.0	0.0												
12	0.0	0.24	0.40	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.12	0.0	0.0	0.22	0.0	0.48	0.0	0.0	1.26	0.0	0.0	0.0												
14	0.08	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.62												
15	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39												
16	0.05S	0.0	0.02S	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.05S	0.15	0.01S	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.05	0.14S	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.30	0.0												
20	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.10	0.20												
21	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0												
22	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0												
23	0.0	0.04S	0.10S	0.0	0.0	0.0	0.0	0.37	0.0	0.09	0.0	0.0												
24	0.07S	0.05S	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.06	0.15	0.0												
25	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.50	0.06	0.0	0.0	0.0												
26	0.01S	0.0	0.0	0.0	0.0	0.0	0.45	0.05	0.17	0.0	0.0	0.25												
27	0.02S	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.05												
28	0.01S	0.0	0.0	0.04	0.0	0.13	0.0	0.13	0.0	0.0	0.0	0.14												
29	0.08	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.55	0.05												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	1.20												
31	0.0		0.0		0.0			0.0				0.0												
TOTAL	1.44	3.67	2.34	0.82	4.47	1.18	3.03	1.82	2.16	1.02	1.76	4.63												
STA AV	2.66	2.40	3.49	3.36	3.81	4.20	4.39	2.70	2.64	2.19	2.48	2.38												

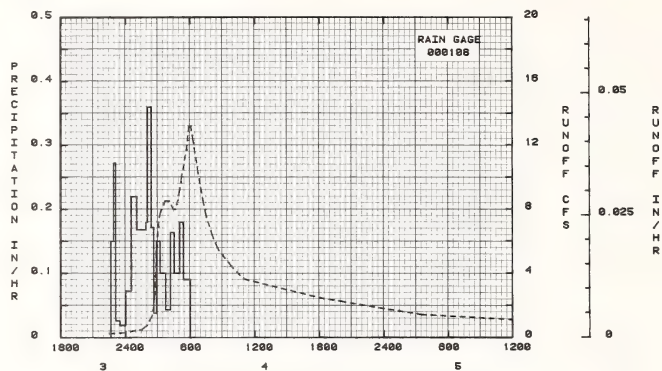
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 108. STA AV based on 35 yr period, part-year records included. Codes 'S' may reflect estimated storm duration rather than estimated rainfall amounts.

COSHOCTON, OHIO WATERSHED 196												
1971 MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.280	0.041	0.729	0.320	0.082	0.085	0.044	0.020	0.013	0.038	0.016	0.032
2	0.270	0.033	0.627	0.320	0.092	0.036	0.019	0.014	0.014	0.018	0.031	0.022
3	0.261	0.018	0.531	0.253	0.089	0.027	0.021	0.028	0.018	0.018	0.028	0.018
4	4.094	1.095	0.477	0.218	0.076	0.071	0.026	0.025	0.020	0.017	0.025	0.020
5	1.131	2.615E	0.452	0.203	0.336	0.062	0.026	0.023	0.015	0.013	0.024	0.025
6	0.661	0.283	2.365	0.203	12.191	0.075	0.027	0.016	0.014	0.011	0.026	0.355
7	0.494	0.198	3.053	0.196	1.812	0.069	0.023	0.014	0.013	0.010	0.033	0.374
8	0.417	0.159	1.230	0.176	2.261	0.058	0.021	0.014	0.012	0.010	0.027	0.009
9	0.406	0.148	0.868	0.164	1.093	0.052	0.059	0.013	0.011	0.020	0.024	0.056
10	0.383	0.166	0.872	0.148	0.825	0.048	0.028	0.024	0.010	0.028	0.023	0.056
11	0.348	0.114	0.851	0.138	0.681	0.046	0.215	0.031	0.010	0.021	0.023	0.052
12	0.308	0.161	1.207	0.138	0.700	0.046	0.048	0.018	0.010	0.016	0.021	0.044
13	0.290	0.540	4.316	0.157	0.505	0.090	0.031	0.014	0.154	0.013	0.020	0.040
14	0.449	0.242	1.707	0.165	0.417	0.067	0.029	0.015	0.027	0.022	0.020	0.378
15	0.293	0.170	1.862	0.138	0.350	0.054	0.025	0.017	0.019	0.020	0.020	0.485E
16	0.218	0.148	1.294	0.128	0.384	0.046	0.022	0.016	0.017	0.016	0.020	0.100
17	0.196	1.008	1.006	0.150	0.347	0.039	0.022	0.012	0.018	0.015	0.020	0.058
18	0.176	1.544	0.834	0.128	0.283	0.036	0.022	0.010	0.017	0.015	0.028	0.046
19	0.149	4.733	0.797	0.114	0.243	0.034	0.023	0.010	0.066	0.013	0.029	0.042
20	0.133	4.981	0.763	0.110	0.204	0.033	0.023	0.025	0.022	0.013	0.027	0.066
21	0.143	1.227	0.729	0.119	0.176	0.034	0.020	0.020	0.018	0.013	0.026	0.055
22	0.153	9.199	0.678	0.119	0.134	0.017	0.018	0.017	0.010	0.030	0.022	0.041
23	0.143	1.784	0.593	0.106	0.143	0.031	0.015	0.038	0.015	0.027	0.017	0.036
24	0.138	0.912	0.505	0.098	0.145	0.030	0.081	0.015	0.015	0.030	0.018	0.036
25	0.153	1.032	0.463	0.091	0.250	0.030	0.037	0.036	0.033	0.026	0.022	0.036
26	0.130	1.144	0.452	0.088	0.148	0.031	0.072	0.050	0.026	0.020	0.022	0.057
27	0.084	1.589	0.429	0.090	0.133	0.031	0.027	0.023	0.018	0.035	0.035	0.066
28	0.066	0.921	0.417	0.130	0.123	0.029	0.026	0.022	0.021	0.017	0.032	0.093
29	0.080	0.383	0.091	0.110	0.059	0.025	0.022	0.021	0.016	0.117	0.068	0.068
30	0.088	0.339	0.085	0.101	0.030	0.027	0.020	0.0	0.016	0.064	0.305	0.055
31	0.064	0.299	0.085	0.085	0.085	0.026	0.015	0.015	0.015	0.015	0.015	0.391
MEAN	0.3937	1.2937	1.0042	0.1528	0.7911	0.0511	0.0374	0.0207	0.0236	0.0186	0.0286	0.2028
INCHES	0.999	2.846	2.445	0.360	1.926	0.120	0.091	0.050	0.056	0.045	0.067	0.494
STA AV	1.727	1.918	2.828	2.309	1.497	1.012	0.708	0.276	0.223	0.200	0.393	0.953

NOTES: To convert CFS to IN/DAY, multiply by 0.0786. STA AV based on 35 yr period, part-year records included.

COSHOCTON, OHIO WATERSHED 196												
1971 SELECTED RUNOFF EVENT												
ATTENDANT CONDITIONS				RAINFALL				RUNOFF				
Date	Rainfall	Date	Time	Intensity	Acc.	Date	Time	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 3 - 5, 1971												
RG 000108												
1-3	0.0	0.019	1-3	2237	0.0	0.0	1-3	2230	0.261	0.0		
				2253	0.1500	0.04		2400	0.318	0.0014		
				2304	0.2727	0.09	1-4	130	0.503	0.0034		
				2003	0.0261	0.10		2000	0.763	0.0044		
				2400	0.0182	0.11		2330	1.400	0.0062		
WATERSHED CONDITIONS:												
Woods, 27%; grassland, 50%;				1-4	33	0.0727	0.15	245	2.860	0.0079		
Miscellaneous, 23%; watershed					103	0.2200	0.26	252	5.400	0.0095		
in improved practice.					153	0.1680	0.40	308	7.500	0.0151		
					203	0.1800	0.43	329	8.000	0.0202		
					223	0.3600	0.55	340	8.500	0.0292		
					237	0.1714	0.59	406	8.520	0.0413		
					253	0.0375	0.60	426	8.000	0.0503		
					313	0.1500	0.65	440	8.000	0.0564		
					343	0.1000	0.70	500	9.050	0.0657		
					411	0.0429	0.72	516	10.200	0.0741		
					433	0.1636	0.78	540	11.700	0.0884		
					503	0.1000	0.83	554	13.200	0.0979		
					523	0.1800	0.89	604	13.200	0.1051		
					603	0.0900	0.95	620	12.100	0.1161		
								646	10.200	0.1319		
								712	8.520	0.1452		
								732	7.500	0.1539		
								810	6.160	0.1661		
								840	5.400	0.1776		
								1000	4.300	0.1988		
								1100	3.620	0.2118		
								1800	2.460	0.2815		
								2000	2.230	0.2969		
								2400	1.770	0.3231		
								330	1.400	0.3413		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.



EVENT OF JANUARY 3 - 5, 1971  
COSHOCTON, OHIO WATERSHED 196

## COSHOCTON, OHIO WATERSHED 95

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Hill Creek, Walhonding River, Muskingum River Basin.

AREA: 2570.00 acres 4.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 95																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971	P	1.56	3.82	2.66	0.66	4.91	1.58	3.03	3.92	1.99	1.06	2.08	4.67	31.96																	
	Q	0.766	2.504	2.177	0.348	1.967	0.143	0.075	0.098	0.044	0.014	0.051	0.694	8.881																	
STA AV	P	2.76	2.45	3.44	3.39	3.75	4.00	4.40	2.81	2.53	2.21	2.57	2.47	36.78																	
	Q	1.458	1.661	2.402	1.943	1.227	0.787	0.580	0.192	0.124	0.181	0.351	0.808	11.714																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge				1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days			
Date	Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1971	5- 6	0.168	5- 6	0.155	5- 6	0.302	5- 6	0.628	5- 6	0.772	5- 5	0.906	5- 6	1.062	2-18	1.793															
MAXIMUMS FOR PERIOD OF RECORD																															
6-28	0.610	6-28	0.560	6-28	0.950	7- 5	1.873	3- 4	2.320	3- 4	2.780	3- 4	3.490	7- 5	4.292																
1957	1957	1957	1957	1957	1957	1957	1957	1963	1963	1963	1963	1963	1963	1969																	

NOTES: Watershed conditions: Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26-35. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.35-1 and 26.37-2. Precipitation data from rain gages 27, 39 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

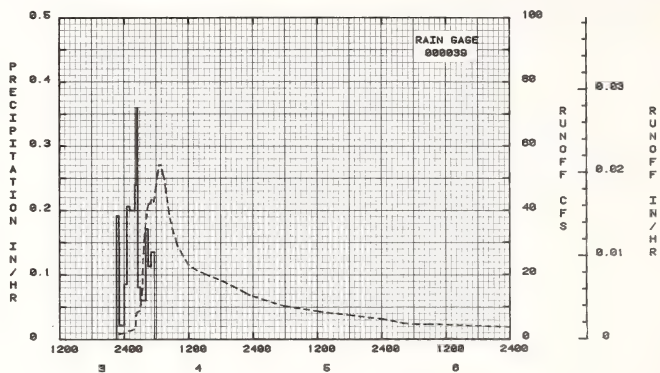
1971 DAILY AIR TEMPERATURE (degrees F)														COSHOCTON, OHIO WATERSHED 95												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min			max	min	max	min	max	min	max	min	max	min	max	min
1	27	18	3 -3	47	30	62	48	62	38	81	57	81	69	75	66	81	65	79	59	67	49	29	18	59	29	18
2	39	22	13 -7	38	27	49	32	48	38	75	60	76	62	79	62	81	63	79	61	67	47	30	15	51	20	15
3	40	24	28	9	27	15	46	30	51	38	80	64	80	55	75	67	78	65	81	61	58	37	31	19	41	19
4	54	28	48	26	28	12	42	25	61	36	84	62	84	60	65	56	80	65	75	65	42	31	37	23	41	23
5	23	14	51	31	37	17	42	28	62	46	86	64	83	67	73	53	85	65	71	53	54	27	47	31	41	21
6	20	8	34	24	46	34	46	30	62	53	86	65	85	65	79	55	86	66	73	49	51	30	51	41	41	21
7	15	3	30	25	34	22	52	26	66	49	81	60	87	65	81	57	81	66	53	41	30	19	51	41	41	21
8	18	3	26	14	22	17	62	32	66	52	74	64	87	64	83	61	84	64	59	34	31	21	54	41	41	21
9	29	13	18	-1	37	14	70	41	70	47	68	49	85	69	84	59	86	65	56	43	35	20	47	44	44	24
10	39	23	15	-2	36	27	53	31	76	52	78	48	82	65	79	66	86	61	49	38	45	35	65	49	49	35
11	38	26	40	14	33	28	48	30	71	52	88	59	71	61	76	61	75	65	55	35	52	34	58	35	35	35
12	33	23	40	34	46	28	74	44	62	43	79	66	77	59	74	54	69	62	59	38	49	43	46	32	32	32
13	48	22	34	11	46	38	76	36	54	39	82	66	82	61	79	53	62	58	70	41	59	46	41	29	29	29
14	51	30	19	0	68	36	46	33	70	37	77	61	76	60	83	61	73	54	64	49	72	45	43	28	28	28
15	30	19	27	15	64	44	54	30	74	49	72	59	79	67	79	59	78	57	71	46	31	61	63	43	43	43
16	20	12	31	24	44	26	66	42	77	52	74	56	79	59	79	59	59	55	69	57	55	43	49	36	36	36
17	21	5	40	24	30	24	68	46	79	50	77	57	75	59	83	55	66	57	69	51	59	39	37	18	18	18
18	18	0	44	37	40	22	64	46	84	59	82	60	78	53	84	61	69	57	69	52	67	46	25	18	18	18
19	13	-1	56	38	42	28	70	45	81	64	85	64	79	59	83	61	71	60	75	45	61	30	38	21	21	21
20	20	8	50	34	31	27	71	46	75	57	85	63	73	55	78	65	71	51	74	52	39	29	40	33	33	33
21	34	18	38	33	46	22	56	35	69	53	80	60	78	54	83	63	65	47	75	50	35	26	38	29	29	29
22	38	23	58	32	42	27	50	34	63	43	77	62	82	57	77	61	68	47	61	55	28	21	32	23	23	23
23	36	23	39	28	27	20	58	37	72	44	81	58	83	59	69	56	69	51	61	57	29	17	45	23	23	23
24	37	24	31	28	30	18	58	38	78	56	85	63	71	58	71	47	61	46	57	34	32	26	49	33	33	33
25	40	32	49	24	36	17	61	40	76	52	86	65	79	58	69	57	63	44	54	51	35	25	47	24	24	24
26	42	10	55	40	42	24	50	38	56	49	80	63	81	67	75	61	72	53	63	51	33	25	53	45	45	45
27	10	5	56	40	49	20	54	30	55	45	89	63	73	59	73	59	77	61	69	47	40	23	61	45	45	45
28	12	4	45	35	60	39	62	44	63	43	96	65	77	53	69	55	61	61	73	53	38	33	60	23	23	23
29	46	4	4	4	46	29	48	42	68	51	88	66	75	62	77	57	83	66	73	51	43	33	31	19	19	19
30	44	1	42	27	54	40	74	52	85	69	89	69	69	59	80	56	78	61	75	50	31	18	60	32	32	32
31	9	-5	59	24	80	60	80	60	72	59	81	62	72	59	81	62	73	55	68	44	33	31	37	22	22	22
AV.	30	14	36	22	41	25	58	37	68	48	81	61	79	61	77	58	74	59	67	50	47	33	45	30	30	30
REAR	22.4	29.1	33.2	47.2	58.2	71.2	69.7	67.9	66.6	58.6	40.0	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
STA AV	33	19	36	20	46	28	58	42	68	49	78	58	81	62	82	61	75	58	66	44	50	33	37	22	22	22

NOTES: Temperature data based on records at North Appalachian Experimental Watershed. STA AV is for 33 yr (1939-71) record period.



1971 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 95					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 3 - 6, 1971											
RG 000039			RG 000039								
1- 3	0.0	0.014	1- 3	2235	0.0	0.0	1- 3	2300	1.600	0.0	
				2300	0.1920	0.08		2400	1.850	0.0007	
				2304	0.1500	0.09	1- 4	185	3.060	0.0024	
				2400	0.0214	0.11		206	4.160	0.0029	
			1- 4	28	0.0857	0.15		218	8.280	0.0034	
WATERSHED CONDITIONS:											
Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice.											
				100	0.2062	0.26		252	8.800	0.0053	
				200	0.2000	0.46		310	12.200	0.0065	
				215	0.2400	0.52		324	15.700	0.0078	
				230	0.3600	0.61		326	20.400	0.0080	
				300	0.0800	0.65		330	23.500	0.0086	
				400	0.0600	0.71		340	28.700	0.0103	
				428	0.1714	0.79		350	33.000	0.0123	
				500	0.1125	0.85		410	37.700	0.0168	
				540	0.1350	0.94		414	38.900	0.0178	
								430	42.100	0.0220	
								444	42.100	0.0258	
								506	43.400	0.0318	
								530	42.700	0.0384	
								554	46.800	0.0453	
								614	51.000	0.0516	
								630	54.000	0.0570	
								650	54.000	0.0639	
								704	52.500	0.0687	
								730	49.600	0.0772	
								750	45.400	0.0833	
								800	44.000	0.0862	
								824	38.900	0.0926	
								900	34.200	0.1011	
								1000	28.700	0.1132	
								1100	25.800	0.1237	
								1200	23.000	0.1331	
								1330	21.300	0.1459	
								1550	19.600	0.1643	
								1820	17.900	0.1824	
								2010	16.400	0.1945	
								2150	14.900	0.2046	
								2320	13.500	0.2128	
								2400	13.200	0.2162	
							1- 5	600	10.100	0.2432	
								1300	8.280	0.2680	
								1800	7.300	0.2830	
								2400	6.170	0.2986	
							1- 6	400	4.820	0.3071	
								600	4.480	0.3107	
								930	4.480	0.3168	

NOTES: To convert runoff in cfs to in/hr, multiply by 0.00038589.



EVENT OF JANUARY 3 - 6, 1971  
COSHOCTON, OHIO WATERSHED 95

## COSHOCTON, OHIO WATERSHED 174

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 52.80 acres

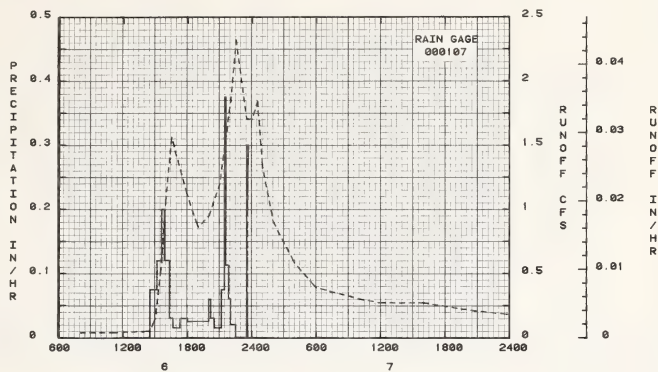
MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 174													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	1.34	3.55	1.90	0.50	4.50	1.02	2.77	1.82	2.26	0.96	1.50	4.44	26.56													
	Q	0.644	2.776	1.692	0.077	1.237	0.001	0.015	0.0	0.008	0.0	0.006	0.343	6.799													
STA AV	P	2.25	2.20	3.47	3.20	3.34	2.86	4.04	2.36	2.44	1.82	2.50	2.49	32.96													
	Q	0.823	1.235	2.211	1.436	0.706	0.263	0.492	0.078	0.046	0.068	0.166	0.443	7.967													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
		Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days																	
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1971		5-6	0.203	5-6	0.160	5-6	0.280	5-6	0.600	5-5	0.713	5-5	0.797	5-5	0.903	2-17	2.016										
MAXIMUMS FOR PERIOD OF RECORD																											
		7-5	1.085	4-25	0.820	4-25	1.110	7-5	1.802	7-5	2.154	7-5	2.365	3-9	2.540	3-4	3.710										
		1969		1961		1961		1965		1969		1969		1965		1964											

NOTES: Watershed conditions: Cover of 15% hardwoods, 2% reforested, 67% grassland, 16% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26-30-1. For description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26-38-1 and 26-30-3. Precipitation data from rain gage 107. Precipitation and runoff records began June 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971					COSHOCTON, OHIO WATERSHED 174																		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.10E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.02E	0.05	0.05	0.0	0.0	0.11	0.0	0.19	0.0											
3	0.05	0.0	0.30E	0.0	0.0	0.05	0.0	0.0	0.21	0.0	0.0	0.0											
4	0.85	0.47	0.30E	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0											
5	0.0	0.18	0.0	0.0	1.26	0.0	0.0	0.01E	0.0	0.0	0.0	0.09											
6	0.0	0.0	0.50	0.0	1.72	0.27	0.0	0.0	0.04	0.0	0.10E	1.11											
7	0.0	0.0	0.035	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.10E	0.47											
8	0.0	1.325	0.035	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.05E	0.0	0.0											
10	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.10E	0.0	0.10	0.0	1.03	0.05	0.0	0.0	0.0	0.0											
12	0.0	0.35E	0.35	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.10	0.0	0.0	0.12	0.0	0.30	0.0	0.0	1.25	0.0	0.0	0.0											
14	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.53											
15	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45											
16	0.02E	0.0	0.05	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.03E	0.15E	0.01E	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.05	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.30	0.0											
20	0.0	0.10	0.04E	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.10	0.15E											
21	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.02E	0.0	0.0	0.0	0.0											
22	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0											
23	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0											
24	0.09E	0.04E	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.10	0.11E	0.0											
25	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.40	0.06	0.0	0.0	0.0											
26	0.01E	0.0	0.0	0.0	0.0	0.0	0.25	0.11	0.16	0.0	0.0	0.27											
27	0.01E	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0											
28	0.01E	0.0	0.0	0.07	0.0	0.19	0.08	0.0	0.0	0.0	0.0	0.12											
29	0.03E	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.50E	0.05E											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	1.10											
31	0.0		0.0		0.0		0.0					0.0											
TOTAL	1.34	3.55	1.90	0.50	4.50	1.02	2.77	1.82	2.26	0.96	1.50	4.44											
STA AV	2.25	2.20	3.47	3.20	3.34	2.86	4.04	2.36	2.44	1.82	2.50	2.49											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 12 yr period, part-year records included. Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.





EVENT OF MARCH 6 - 7, 1971

COSHOCTON, OHIO WATERSHED 174

## COSHOCTON, OHIO WATERSHED 194

LOCATION: Coshocton Co., Ohio 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 187.00 acres

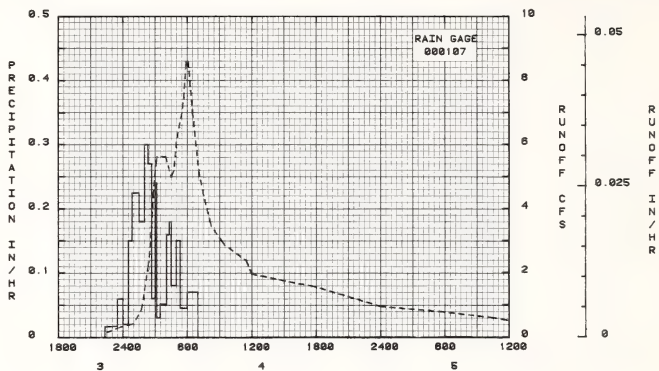
MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 194														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	1.34	3.55	1.90	0.50	4.50	1.02	2.77	1.82	2.26	0.96	1.50	4.44	26.56														
Q	0.975	3.093	2.203	0.323	1.648	0.091	0.100	0.031	0.048	0.023	0.048	0.403	8.986														
STA AV P	2.30	2.28	3.27	3.07	3.30	2.86	4.04	2.36	2.44	1.82	2.50	2.49	32.72														
Q	1.282	1.743	3.038	2.136	1.375	0.546	0.665	0.145	0.104	0.161	0.323	0.734	12.250														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days																			
Date Rate	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.																			
1971	5- 6	0.169	5- 6	0.144	5- 6	0.256	5- 6	0.572	5- 5	0.719	5- 5	0.817	5- 5	0.923	2-17	1.816											
RAINFALLS FOR PERIOD OF RECORD																											
7- 5	0.959	4-25	0.680	4-25	0.930	7- 5	1.620	7- 5	1.979	7- 5	2.269	3- 9	2.600	3- 4	3.890												
1969		1961		1961		1969		1969		1969		1969		1964		1964											

NOTES: Watershed conditions: Cover of 21% hardwoods, 2% reforested, 58% grassland, 11% cultivated, 8% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26.30-4. For ecology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.39-1 and 26.30-3. Precipitation data from rain gage 107. Precipitation and runoff records began Jan. 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 194												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.10E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.02E	0.05	0.05	0.0	0.0	0.11	0.0	0.19	0.0													
3	0.05	0.0	0.30E	0.0	0.0	0.05	0.0	0.0	0.21	0.0	0.0	0.0													
4	0.85	0.47	0.30E	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0													
5	0.0	0.18	0.0	0.0	1.26	0.0	0.0	0.01E	0.0	0.0	0.0	0.05													
6	0.0	0.0	0.50	0.0	1.72	0.27	0.0	0.0	0.04	0.0	0.10E	1.11													
7	0.0	0.03E	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.47													
8	0.0	1.32E	0.03E	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.34E	0.05E	0.0													
10	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.10E	0.0	0.10	0.0	1.03	0.05	0.0	0.0	0.0	0.0													
12	0.0	0.35E	0.35	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.10	0.0	0.0	0.12	0.0	0.30	0.0	0.0	1.25	0.0	0.0	0.0													
14	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.53													
15	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45													
16	0.02E	0.0	0.0 S	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.03E	0.15E	0.01E	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.05	0.03E	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.30	0.0													
20	0.0	0.10	0.04E	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.10	0.15E													
21	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.02E	0.0	0.0	0.0	0.0													
22	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0													
23	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.10	0.0	0.0													
24	0.09E	0.04E	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.10	0.11E	0.0													
25	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.40	0.06	0.0	0.0	0.0													
26	0.01E	0.0	0.0	0.0	0.0	0.0	0.25	0.11	0.16	0.0	0.0	0.27													
27	0.01E	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.05E													
28	0.01E	0.0	0.0	0.07	0.0	0.19	0.08	0.0	0.0	0.0	0.0	0.12													
29	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50E	0.05E	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	1.10	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.34	3.55	1.90	0.50	4.50	1.02	2.77	1.82	2.26	0.96	1.50	4.44													
STA AV	2.30	2.28	3.27	3.07	3.30	2.86	4.04	2.36	2.44	1.82	2.50	2.49													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 12 yr period. Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.





EVENT OF JANUARY 3 - 5, 1971  
COSHOCTON, OHIO WATERSHED 194

## COSHOCTON, OHIO WATERSHED 166

LOCATION: Coshocton County, Ohio; 10 miles NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 79.20 acres

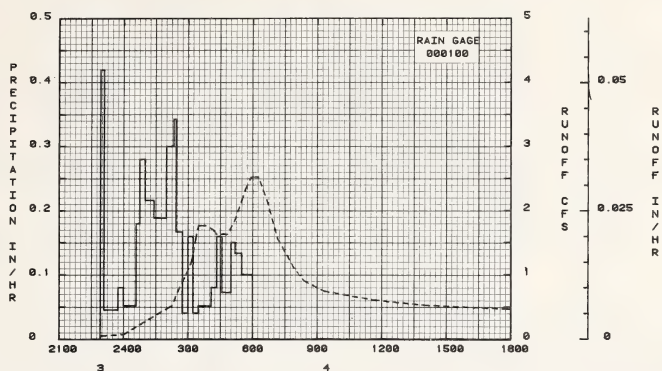
MONTHLY PRECIPITATION AND RUNOFF (inches)												COSHOCTON, OHIO WATERSHED 166											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	1.43	3.44	2.47	0.57	4.38	1.16	2.90	1.75	2.26	0.96	1.70	4.15	27.17										
Q	0.783	2.802	2.012	0.195	1.130	0.019	0.010	0.0	0.001	0.0	0.001	0.218	7.171										
STA AV P	2.60	2.23	3.31	3.21	3.84	3.82	4.32	2.70	2.61	2.04	2.48	2.32	35.49										
Q	1.070	1.419	2.079	1.325	1.272	0.222	1.168	0.090	0.029	0.053	0.201	0.820	9.749										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days			
Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.
1971 5-6	0.115	5-6	0.095	5-6	0.165	5-6	0.364	2-22	0.475	2-19	0.660	2-18	0.912	2-17	1.978								
MAXIMUMS FOR PERIOD OF RECORD																							
7-27	0.921	7-5	0.539	7-5	0.866	7-5	1.593	7-5	1.876	7-5	2.054	7-5	2.249	7-4	3.215								
1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969								

NOTES: Watershed conditions: Cover of 4%, hardwoods; 6%, reforested; 67%, grassland; 17%, cultivated; 6%, miscellaneous. Watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 26-41-7. Precipitation records began 1940. Runoff records began January 1, 1967. Precipitation data from rain gage 100. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1971 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 166											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.08	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.02	0.06	0.05	0.0	0.0	0.09E	0.0	0.19	0.0												
3	0.12	0.0	0.30S	0.0	0.0	0.05	0.0	0.0	0.07E	0.0	0.0	0.0												
4	0.82	0.35	0.30S	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0												
5	0.0	0.20	0.0	0.0	1.25	0.0	0.0	0.01E	0.0	0.0	0.0	0.25												
6	0.0	0.0	0.65	0.0	1.66	0.29	0.0	0.0	0.06E	0.0	0.23H	0.87												
7	0.0	0.0 T	0.05H	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.50H												
8	0.0	1.32S	0.05H	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.33	0.06H	0.0	0.0												
10	0.0	0.0	0.25S	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0 T												
11	0.0	0.0	0.10S	0.0	0.06	0.0	1.17	0.0 T	0.0	0.0	0.0	0.0												
12	0.0	0.30H	0.35E	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.07	0.0 T	0.0	0.15	0.0	0.45	0.0	0.0	1.32	0.0	0.0	0.0 T												
14	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.60												
15	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35												
16	0.04S	0.0	0.01S	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.05S	0.06	0.01S	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05H												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.02	0.15S	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.35	0.0												
20	0.0	0.10	0.0 T	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.07	0.100												
21	0.0	0.0	0.0	0.05	0.0	0.03	0.0	0.0 T	0.0	0.0	0.0	0.0												
22	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0												
23	0.0	0.04S	0.10S	0.0	0.0	0.0	0.0	0.28	0.0	0.08	0.0	0.0												
24	0.09S	0.05S	0.0	0.0	0.35	0.0	0.65	0.0	0.0	0.11	0.12H	0.0												
25	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.25	0.10	0.0	0.0	0.0												
26	0.01S	0.0	0.0	0.0	0.0	0.0	0.16	0.24	0.17	0.0	0.0	0.25												
27	0.01S	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15H	0.05E												
28	0.01S	0.0	0.0	0.02E	0.0	0.15	0.07	0.0	0.0	0.0	0.0	0.13												
29	0.09H	0.0	0.0	0.0	0.0	0.14	0.0 T	0.0	0.0	0.0	0.53H	0.0 T												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	1.43	3.44	2.47	0.57	4.38	1.16	2.90	1.75	2.26	0.96	1.70	4.15												
STA AV	2.60	2.23	3.31	3.21	3.84	3.82	4.32	2.70	2.61	2.04	2.48	2.32												

NOTES: For daily air temperatures for the vicinity, see table for Watershed 9-95, p. 26.035-1. Precipitation amounts are for rain gage 100. STA AV based on 32 yr period (1940-1971). Codes 'E' may reflect estimated storm duration rather than estimated rainfall amounts.





EVENT OF JANUARY 3 - 4, 1971  
COSHOCTON, OHIO WATERSHED 166

## STILLWATER, OKLAHOMA WATERSHED W-1

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 16.70 acres

STILLWATER, OKLAHOMA WATERSHED W-1												
MONTHLY PRECIPITATION AND RUNOFF (inches)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1971 P	1.46	1.48	0.05	2.58	2.92	5.38	5.73	0.92	9.89	3.51	0.55	2.52
Q	0.448	1.047	0.046	0.482	0.927	1.999	0.064	0.0	1.732	0.949	0.060	1.583
STA AV P	0.63	1.04	1.89	2.49	4.77	4.06	4.01	2.70	3.96	2.44	1.48	1.18
Q	0.160	0.308	0.790	0.846	1.618	0.958	0.574	0.062	0.945	0.596	0.346	0.270
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
Date	Maximum Discharge		Date	1 Hour		Date	2 Hours		Date	Maximum Volume for Selected Time Interval		Date
	Date	Vol.		Date	Vol.		Date	Vol.		Date	Vol.	
1971	9-24	0.670	9-24	0.540	9-24	0.813	9-24	1.044	12-14	1.156	12-14	1.250
												1.321
												9-17
												1.607
MAXIMUMS FOR PERIOD OF RECORD												
	4-18	6.990	7-15	3.314	7-15	3.737	7-15	3.963	10-2	4.519	7-4	5.185
	1957		1951		1951		1951		1959		1959	
												5.679
												9-29
												7.627

NOTES: Watershed conditions: All native grass pasture located in region (R-80) of the Central Rolling Red Prairies land resource area. The pasture was in poor condition at the beginning of the growing season due to a rainfall deficit and heavy grazing during 1970. In 1971 the precipitation total was 6.38 inches above station average, with moderate grazing. Vegetative cover measured in September was 0.66 tons per acre more than that measured at the same time in 1970. There was a gain of 2.22 inches in soil moisture for the year. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 37.1-7 (Revised). Precipitation data obtained from R-1 recording rain gage. Precipitation and runoff records began July 1951. Station average precipitation data from R-3 recording rain gage record through 1964 combined with data from R-1 for 1965 through 1971. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

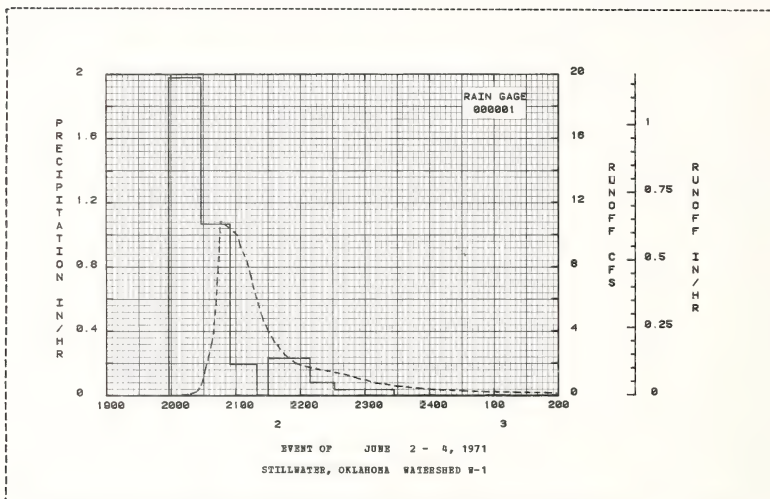
STILLWATER, OKLAHOMA WATERSHED W-1												
DAILY PRECIPITATION (inches)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.05	0.0	0.0	0.36	1.98	0.0	0.0	0.0	0.0	0.0
2	0.78	0.0	0.0	0.0	0.0	1.76	0.0	0.0	0.0	1.23	0.0	0.04
3	0.68	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.06
4	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	1.37	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.29	0.0	0.0	0.0
6	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	1.96	0.0	0.0	0.02
7	0.0	0.04	0.0	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.01	0.0	0.0	0.13	0.17
9	0.0	0.0	0.0	0.0	0.14	0.09	0.0	0.0	0.0	0.0	0.0	0.07
10	0.0	0.0	0.0	0.0	0.35	0.06	1.73	0.43	0.0	0.0	0.0	0.01
11	0.0	0.04	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	1.61
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
16	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	2.35	0.0	0.0	0.0
18	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.74	0.79	0.0	0.0	0.0
19	0.0	0.0	0.0	0.89	0.0	0.0	0.09	0.0	0.0	0.31	0.0	0.0
20	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0
21	0.0	1.05	0.0	0.0	0.0	0.08	0.0	0.24	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	1.29	0.58	0.0	0.80	0.01	0.0	0.0	0.31	0.0
23	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.10	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.92	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.06	0.88	0.0	0.31	0.0	0.0	0.58	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.01	0.0
29	0.0	0.0	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.51	0.0
30	0.0	0.0	0.0	0.0	0.04	0.03	0.0	0.0	0.0	0.07	0.0	0.0
31	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.46	1.48	0.05	2.58	2.92	5.38	5.73	0.92	9.89	3.51	0.55	2.52
STA AV	0.63	1.04	1.89	2.49	4.77	4.06	4.01	2.70	3.96	2.44	1.48	1.18

NOTES: Amounts recorded at rain gage R-1 used for current monthly totals and for runoff events. STA AV based on 21 yr (1951-71) record period.



1971 SELECTED SUBOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-1								
ANTECEDENT CONDITIONS			RAINFALL			SUBOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JUNE 2 - 4, 1971 (CONTINUED)											
							6- 2	2116	6.908	0.3552	
								2121	5.725	0.3864	
								2126	4.631	0.4120	
								2131	3.907	0.4332	
								2136	3.334	0.4511	
								2146	2.492	0.4799	
								2156	1.970	0.5020	
								2210	1.701	0.5274	
								2241	1.363	0.5735	
								2256	1.002	0.5906	
								2310	0.761	0.6020	
								2330	0.556	0.6158	
								2350	0.406	0.6253	
								2400	0.360	0.6291	
							6- 3	10	0.320	0.6325	
								31	0.261	0.6385	
								51	0.205	0.6431	
								120	0.163	0.6484	
								149	0.123	0.6525	
								245	0.089	0.6584	
								326	0.071	0.6616	
								446	0.058	0.6665	
								718	0.037	0.6732	
								1300	0.017	0.6824	
								2400	0.008	0.6906	
							6- 4	1240	0.0	0.6936	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.



## STILLWATER, OKLAHOMA WATERSHED W-3

LOCATION: Noble Co., Okla.; 15 mi. W. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 92.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										STILLWATER, OKLAHOMA WATERSHED W-3									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual						
1971 P	1.46	1.80	0.05	2.70	2.86	5.19	5.33	1.07	9.09	3.24	0.58	2.25	35.62						
Q	0.108	0.419	0.016	0.183	0.002	0.954	0.019	0.0	1.302	0.490	0.014	1.164	4.670						
STA AV P	0.63	1.05	1.91	2.43	4.71	3.99	3.95	2.71	3.81	2.40	1.46	1.16	30.23						
Q	0.045	0.170	0.589	0.679	1.393	0.772	0.485	0.075	0.364	0.517	0.180	0.135	5.403						

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS										STILLWATER, OKLAHOMA WATERSHED W-3									
Maximum Discharge	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days			Maximum Volume for Selected Time Interval	1 Day	2 Days	8 Days						
Date	Date	Date	Date	Date	Date	Date	Date			Date	Date	Date	Date						
1971	9-24	0.381	9-24	0.344	9-24	0.557	9-24	0.803	12-14	0.889	12-14	0.929	12-14	0.958	9-17	1.262			

MAXIMUMS FOR PERIOD OF RECORD										STILLWATER, OKLAHOMA WATERSHED W-3									
7-15	4.739	7-15	2.896	7-15	3.486	7-15	3.796	10-1	4.957	10-1	5.185	10-1	6.083	9-30	8.143				
1951	1951	1951	1951	1951	1951	1951	1951	1959	1959	1959	1959	1959	1959	1959	1959				

NOTES: Watershed conditions: All native grass cover, 32% of watershed in hay meadow and 68% in pasture, and located in region (II-10) of the Central Rolling Red Prairies land resource area. The pasture land was heavily grazed and the condition reflects the abuse from heavy grazing and drought during 1970. For map of watershed, see Selected Runoff Events for Small Agricultural Watersheds in the United States, USDA, ARS, Jan. 1960, p. 37.2-5. Precipitation data obtained from R-3 recording rain gage. Precipitation and runoff records began July 1951. STA AV based on 21 yr (1951-71) record period. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1971 DAILY PRECIPITATION (inches)										STILLWATER, OKLAHOMA WATERSHED W-3									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
1	0.0	0.0	0.05	0.0	0.0	0.40	1.69	0.0	0.0	0.0	0.0	0.0							
2	0.79	0.0	0.0	0.0	0.0	1.73	0.0	0.0	0.0	1.29	0.0	0.06							
3	0.67	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.07							
4	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0							
5	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.29	0.0	0.0	0.0							
6	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	2.01	0.0	0.0	0.02							
7	0.0	0.06	0.0	0.0	0.0	1.44	0.0	0.0	0.0	0.0	0.0	0.0							
8	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.04	0.0	0.0	0.14	0.17							
9	0.0	0.0	0.0	0.0	0.16	0.09	0.0	0.0	0.0	0.0	0.0	0.02							
10	0.0	0.0	0.0	0.0	0.31	0.06	1.72	0.54	0.0	0.0	0.0	0.0							
11	0.0	0.05	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0							
12	0.0	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.0	0.0							
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0							
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
16	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
17	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.0							
18	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	1.62	0.66	0.0	0.0							
19	0.0	0.0	0.0	0.84	0.0	0.0	0.05	0.0	0.0	0.28	0.0	0.0							
20	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0							
21	0.0	1.30	0.0	0.0	0.0	0.08	0.0	0.24	0.0	0.0	0.0	0.0							
22	0.0	0.02	0.0	1.36	0.60	0.0	0.76	0.0	0.0	0.34	0.0	0.0							
23	0.0	0.03	0.0	0.04	0.11	0.0	0.02	0.0	0.01	0.0	0.09	0.0							
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78	0.0	0.0	0.0							
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0							
26	0.0	0.0	0.0	0.07	0.89	0.0	0.32	0.0	0.0	0.50	0.0	0.0							
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
28	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.01	0.0	0.0							
29	0.0	0.0	0.0	0.07	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.42							
30	0.0	0.0	0.0	0.0	0.04	0.06	0.0	0.0	0.0	0.06	0.0	0.0							
31	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
TOTAL	1.46	1.80	0.05	2.70	2.86	5.19	5.33	1.07	9.09	3.24	0.58	2.25							
STA AV	0.63	1.05	1.91	2.43	4.71	3.99	3.95	2.71	3.81	2.40	1.46	1.16							

NOTES: Amounts recorded at rain gage R-3 used for current monthly totals and for runoff events. STA AV based on 21 yr (1951-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													STILLWATER, OKLAHOMA WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.037	0.0	0.0	0.031	0.006	0.0	0.0	0.037	0.0	1	0.0	0.0	0.0	0.0	0.0	0.859	0.0	0.0	0.857	0.016	0.0	
2	0.009	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0.334	0.0	0.0	0.0	0.0	0.179	0.0	0.0	0.226	0.0	0.0	
3	0.334	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.037	0.0	3	0.065	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.037	0.0	
4	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	4	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	
5	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.062	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.733	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.0	0.846	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.017	0.066	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.054	0.001	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	1.101	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.130	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	2.960	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.960	14	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.689	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.689	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.095	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.095	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.067	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.067	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.238	0.0	0.058	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.238	0.0	0.0	0.058	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.051	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.0	0.051	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.111	0.037	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.111	0.0	0.037	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.066	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.037	
22	0.0	0.0	0.0	0.449	0.0	0.0	0.0	0.0	0.0	0.0	0.051	0.032	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.051	0.0	0.032	
23	0.0	0.0	0.0	0.166	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.019	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.019	
24	0.0	0.030	0.0	0.053	0.0	0.0	0.0	0.0	0.0	3.215	0.014	0.019	24	0.0	0.030	0.0	0.053	0.0	0.0	0.0	3.215	0.014	0.019	0.019	
25	0.0	1.326	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.386	0.0	0.019	25	0.0	1.326	0.0	0.023	0.0	0.0	0.0	0.386	0.0	0.0	0.019	
26	0.0	0.162	0.0	0.008	0.007	0.0	0.0	0.0	0.0	0.055	0.043	0.0	26	0.0	0.162	0.0	0.008	0.007	0.0	0.0	0.0	0.055	0.043	0.0	
27	0.0	0.058	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.231	0.013	0.019	27	0.0	0.058	0.0	0.008	0.0	0.0	0.0	0.231	0.013	0.019	0.019	
28	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065	0.0	28	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.065	0.0	0.019	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	0.090	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	0.191	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	0.0	0.191	
31	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.082	0.0	0.076	31	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.082	0.0	0.0	0.076	
MEAN	0.0134	0.0578	0.0020	0.0236	0.0003	0.1229	0.0024	0.0	0.1678	0.0611	0.0018	0.1451	MEAN	0.0134	0.0578	0.0020	0.0236	0.0003	0.1229	0.0024	0.0	0.1678	0.0611	0.0018	0.1451
INCHES	0.108	0.419	0.016	0.183	0.002	0.954	0.019	0.0	1.392	0.490	0.014	1.164	INCHES	0.108	0.419	0.016	0.183	0.002	0.954	0.019	0.0	1.392	0.490	0.014	1.164
STA AV	0.045	0.170	0.589	0.679	1.393	0.772	0.485	0.075	0.364	0.517	0.180	0.135	STA AV	0.045	0.170	0.589	0.679	1.393	0.772	0.485	0.075	0.364	0.517	0.180	0.135

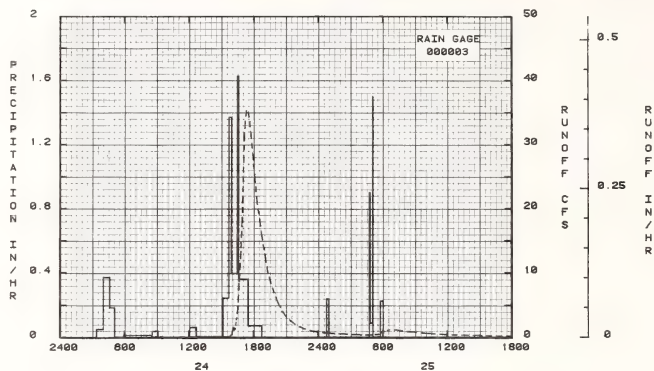
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.258714.

1971 SELECTED RUNOFF EVENT						STILLWATER, OKLAHOMA WATERSHED W-3										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	Mo-Day	of Day	(cfs)	(inches)				
EVENT OF SEPTEMBER 24 - 27, 1971																
EG 000003																
9-24	0.09	0.0	9-24	326	0.0	0.0	9-24	730	0.0	0.0						
				403	0.0486	0.03		804	0.043	0.0001						
				480	0.3730	0.26		1515	0.043	0.0034						
				506	0.1846	0.34		1548	0.122	0.0039						
				556	0.0	0.34		1552	0.247	0.0040						
WATERSHED CONDITIONS:																
100% of area in native grass;			837	0.0112	0.37		1554	0.256	0.0041							
32% in hay meadow in good			854	0.0353	0.38		1601	0.433	0.0045							
condition, 46% in pasture in			909	0.0400	0.39		1602	0.670	0.0046							
fair condition, and 22% in			916	0.0	0.39		1604	0.904	0.0049							
pasture in poor condition.			1205	0.0	0.39		1605	1.152	0.0051							
			1284	0.0615	0.43		1606	1.377	0.0053							
			1512	0.0041	0.44		1607	1.538	0.0055							
			1544	0.2437	0.57		1608	1.458	0.0058							
			1558	1.3715	0.89		1610	1.352	0.0063							
			1630	0.3937	1.10		1612	1.084	0.0068							
			1637	1.6288	1.29		1619	1.308	0.0083							
			1729	0.2577	1.40		1621	1.869	0.0088							
			1847	0.0692	1.69		1623	2.306	0.0096							
			50	0.0	1.69		1625	2.718	0.0104							
			100	0.2400	1.73		1628	3.033	0.0120							
			447	0.0	1.73		1631	3.704	0.0138							
			451	0.8000	1.79		1634	4.744	0.0161							
			505	0.0857	1.81		1636	5.793	0.0179							
			507	1.5001	1.86		1638	7.319	0.0204							
			549	0.0	1.86		1639	8.368	0.0217							
			605	0.2250	1.92		1641	8.663	0.0246							
							1644	9.774	0.0296							
							1647	11.496	0.0354							
							1650	13.259	0.0422							
							1654	15.716	0.0526							

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01078.

1971 SELECTED RUNOFF EVENT				STILLWATER, OKLAHOMA WATERSHED #=3			
ANTECEDENT CONDITIONS			RAINFALL		RUNOFF		
Date	Rainfall	Runoff	Date	Time	Date	Time	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	Mo-Day	of Day	(inches)
EVENT OF SEPTEMBER 24 - 27, 1971 (CONTINUED)							
				9-24	1658	18.664	0.0649
					1701	21.950	0.0760
					1703	24.962	0.0839
					1706	27.577	0.0983
					1709	31.025	0.1183
					1714	33.672	0.1429
					1721	35.339	0.1865
					1732	35.024	0.2561
					1746	31.684	0.3404
					1759	27.619	0.4091
					1810	24.097	0.4603
					1822	20.637	0.5083
					1837	17.982	0.5603
					1851	15.123	0.6021
					1907	12.347	0.6414
					1921	10.045	0.6697
					1938	8.318	0.6979
					1956	6.868	0.7222
					2013	5.609	0.7414
					2031	4.631	0.7580
					2045	3.879	0.7688
					2103	3.173	0.7801
					2127	2.556	0.7925
					2153	2.005	0.8032
					2218	1.569	0.8112
					2250	1.227	0.8193
					2324	0.954	0.8260
				9-25	2400	0.789	0.8317
					45	0.640	0.8375
					130	0.537	0.8423
					242	0.441	0.8486
					400	0.341	0.8541
					500	0.318	0.8577
					519	0.359	0.8589
					540	0.446	0.8604
					549	0.574	0.8612
					555	0.740	0.8619
					601	0.824	0.8628
					610	0.896	0.8642
					627	1.042	0.8672
					641	1.128	0.8699
					720	1.084	0.8777
					750	0.973	0.8832
					822	0.823	0.8883
					910	0.710	0.8949
					1002	0.591	0.9010
					1054	0.482	0.9060
					1202	0.384	0.9113
					1256	0.321	0.9147
					1400	0.258	0.9180
					1516	0.204	0.9212
					1640	0.151	0.9239
					1800	0.116	0.9258
					2010	0.091	0.9282
					2400	0.073	0.9316
				9-26	530	0.054	0.9357
					2400	0.037	0.9458
				9-27	950	0.018	0.9487
					1430	0.0	0.9492

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01078.



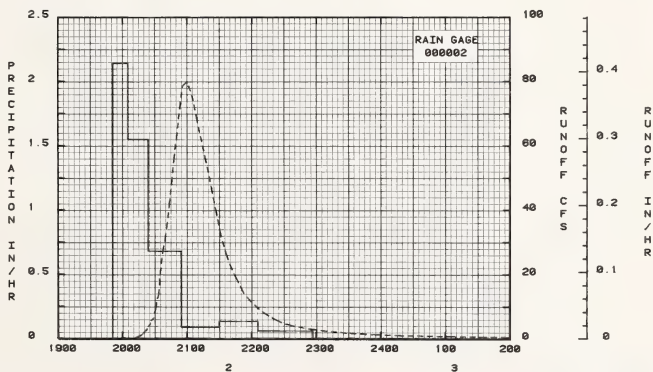
EVENT OF SEPTEMBER 24 - 27, 1971  
 STILLWATER, OKLAHOMA WATERSHED W-3





1971 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-4						
ANTECEDENT CONDITIONS			RAINFALL		RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF JUNE 2 - 3, 1971 (CONTINUED)									
			6- 2				2110	67.169	0.1750
							2117	56.202	0.2097
							2123	46.661	0.2345
							2128	38.282	0.2515
							2132	31.585	0.2627
							2137	25.923	0.2742
							2142	21.399	0.2837
							2148	17.417	0.2930
							2153	14.046	0.2993
							2200	11.366	0.3064
							2207	9.142	0.3121
							2212	7.856	0.3155
							2220	6.261	0.3200
							2228	4.917	0.3236
							2240	3.778	0.3278
							2256	2.846	0.3321
							2310	2.266	0.3350
							2328	1.680	0.3379
							2347	1.352	0.3402
							2400	1.157	0.3415
			6- 3				17	0.928	0.3429
							44	0.739	0.3447
							110	0.582	0.3461
							139	0.461	0.3473
							206	0.382	0.3482
							238	0.303	0.3491
							315	0.243	0.3499
							400	0.181	0.3507
							440	0.120	0.3512
							532	0.102	0.3517
							544	0.060	0.3522
							832	0.042	0.3526
							1315	0.021	0.3533
							1650	0.021	0.3537
							1858	0.0	0.3538

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000814.



EVENT OF JUNE 2 - 3, 1971  
STILLWATER, OKLAHOMA WATERSHED W-4

## RIESEL (WACO), TEXAS WATERSHED C

LOCATION: McLennan Co., Texas; 14 mi. ESE of Waco; Brazos River Basin.

AREA: 579.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED C																			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																				
1971 P	0.03	1.73	0.44	3.43	2.43	1.09	10.61	2.23	1.74	4.65	5.13	6.55	40.04																				
Q	0.0	0.0	0.0	0.0	0.0	0.0	1.981	0.002	0.0	0.410	1.906	2.935	7.134																				
STA AV P	1.85	2.80	2.18	3.85	3.95	3.38	1.82	2.53	3.15	2.95	3.12	2.45	34.03																				
Q	0.424	0.633	0.624	0.980	0.895	0.609	0.237	0.178	0.346	0.306	0.539	0.612	6.382																				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																	
Maximum Discharge												Maximum Volume for Selected Time Interval																					
Date		Rate		Date		Vol.		1 Hour		2 Hours		Date		Vol.		6 Hours		12 Hours		1 Day		2 Days		8 Days									
Date		Rate		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.							
1971		11-17		0.900		11-17		0.799		11-17		1.272		11-17		1.719		11-17		1.828		12-9		1.954		12-8		2.268		12-2		2.861	
MAXIMUMS FOR PERIOD OF RECORD																																	
3-29		1.580		3-29		1.500		3-29		2.520		3-29		3.550		3-29		3.800		3-29		4.480		9-7		7-4		4.780		4-19		8.760	
1965				1965				1965				1965				1965				1965				1965				1957					

NOTES: Watershed conditions: 61% pasture; 12% row grain sorghum; 2% gravel and paved roads; 5% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 985, p. 42.4-6. Precipitation and runoff records began in March, 1938; data not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges 5, 14 and 26. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY AIR TEMPERATURE (degrees F)													RIESEL (WACO), TEXAS WATERSHED C												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
1	57	36	51	34	72	52	81	56	70	53	89	72	94	70	81	64	88	65	87	65	81	61	50	41	
2	66	38	43	34	75	43	70	39	80	58	89	72	98	73	81	66	88	67	88	66	80	57	48	41	
3	69	53	46	36	43	66	29	41	87	60	91	71	99	75	73	68	89	70	90	71	79	50	42	37	
4	79	29	71	41	47	28	73	44	85	60	88	68	98	73	82	71	92	74	88	62	69	43	41	37	
5	39	19	68	29	61	34	71	41	85	65	89	64	98	72	81	70	94	75	74	64	69	49	42	40	
6	36	19	67	34	77	43	65	43	86	70	90	66	99	73	79	71	94	73	77	63	78	49	43	40	
7	39	28	54	31	57	31	63	38	84	65	90	70	100	76	79	69	95	73	82	58	67	44	46	37	
8	32	22	37	16	56	32	71	41	88	65	94	71	102	73	85	69	94	69	82	60	61	45	65	40	
9	45	25	46	19	67	41	79	52	85	66	93	71	96	73	88	70	92	71	70	62	62	48	69	52	
10	68	29	43	23	76	39	78	51	83	68	94	73	98	75	89	74	87	73	78	48	71	43	56	42	
11	76	44	63	32	66	46	80	52	77	64	94	75	97	72	90	73	85	74	73	49	70	44	64	38	
12	80	41	75	45	81	55	84	56	74	58	95	75	97	74	91	75	89	71	82	55	76	45	61	40	
13	51	39	59	29	82	59	85	62	72	48	95	71	97	76	86	70	91	70	80	60	76	54	63	40	
14	71	51	58	34	88	61	79	55	72	53	96	73	99	76	85	72	92	70	79	56	81	60	67	45	
15	78	39	76	40	88	44	67	55	77	55	94	73	99	76	88	72	92	67	81	64	81	59	75	42	
16	53	31	73	52	75	47	81	61	82	62	92	69	100	76	90	70	91	68	86	68	78	57	69	46	
17	65	34	79	54	77	45	72	55	86	60	95	71	100	77	87	72	89	65	83	66	77	60	68	48	
18	68	41	79	53	79	58	77	60	87	65	97	69	98	75	88	72	88	66	82	72	74	55	53	36	
19	63	25	81	60	79	38	81	66	85	62	95	69	100	74	89	71	80	56	86	69	60	38	39	39	
20	64	26	76	49	60	38	82	50	80	60	91	70	100	74	90	71	67	48	82	60	54	40	69	48	
21	61	29	75	49	67	42	63	49	79	61	91	69	95	71	89	73	76	51	73	53	70	41	73	45	
22	76	44	52	28	79	54	81	58	83	68	91	71	83	68	90	71	76	59	73	54	71	48	64	38	
23	78	51	53	31	79	48	83	58	84	71	89	69	96	76	91	73	76	65	73	56	51	38	50	42	
24	62	52	63	38	68	40	77	51	85	65	95	69	96	71	92	74	74	68	70	52	49	35	64	49	
25	74	45	68	51	55	45	78	58	80	59	98	71	78	69	90	72	84	69	75	53	57	37	66	53	
26	81	43	64	55	55	38	82	65	89	65	95	72	83	68	91	70	86	72	77	54	58	41	72	55	
27	75	37	72	39	70	40	83	67	89	67	93	73	89	71	89	71	88	72	81	54	68	40	72	61	
28	59	39	67	45	75	55	89	61	89	66	92	69	86	71	93	72	88	70	81	55	65	44	73	50	
29	71	49			74	53	85	64	89	71	90	77	91	70	94	70	89	69	81	64	70	39	58	50	
30	78	53			73	82	74	59	84	69	92	75	87	67	86	65	88	66	81	62	58	41	78	55	
31	85	41			74	48			86	70			75	63	89	67				80	59			64	50
AV.	64	37	63	35	70	44	77	54	83	63	93	71	94	73	87	71	87	68	80	60	69	47	61	44	
MEAN	50.9	50.8	57.1	65.2	72.9	78.9	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	
STA AV	57	37	62	40	69	47	77	56	83	63	89	70	94	72	94	72	88	66	81	57	68	46	61	39	

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 0800 of the day shown. STA AV based on 33 yr. (1939-1971) period.

1971 DAILY PRECIPITATION (inches)												RISSEL (WACO), TEXAS		WATERSHED C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.06E	0.11E	0.0	0.0	0.0	0.0	0.30	0.00E	0.0	0.0	0.0	0.98		
3	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0			
4	0.0	0.1E	0.0	0.01E	0.0	0.0	0.0	0.15	0.0	0.16	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.19E	0.0	0.11E	0.0	0.0	0.67		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.46		
7	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.70		
9	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.07E	0.0	2.39			
10	0.0	0.0	0.0	0.0	1.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.99	0.07E	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.26			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	2.30	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0			
17	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	4.22	0.03E			
18	0.0	0.75	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.20E	0.26	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.02E	1.69	0.0	0.0			
20	0.0	0.0	0.0	0.80	0.62	0.0	0.0	0.0	0.0	1.33	0.0	0.0			
21	0.0	0.16	0.0	0.0	0.0	0.85	4.63	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.00E	0.0	0.10E	0.0	0.0	0.91	0.0	0.64	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.02E	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.12E	0.0	2.34	0.0	0.74	0.0	0.0	0.0			
25	0.0	0.65	0.10E	0.0	0.0	0.0	1.19	0.35	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.01E	0.06E	1.19	0.0	0.0	0.17	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.04E	0.09	0.0	0.0	0.0	0.01E	0.08E			
29	0.0	0.0	0.17	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.19	0.0	0.0	0.0	0.48			
31	0.0	0.0	0.0	0.0	0.03E	0.0	0.05E	0.0	0.0	0.0	0.0	0.42			
TOTAL	0.03	1.73	0.44	3.43	2.43	1.09	10.61	2.23	1.74	4.65	5.13	6.55			
STA AV	1.85	2.80	2.18	3.85	3.95	3.38	1.82	2.53	3.15	2.95	3.12	2.45			

NOTES: Precipitation values are Thiessen weighted average of rain gages 5, 14, and 20. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												RISSEL (WACO), TEXAS		WATERSHED C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.001			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	3.194			
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	1.005			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.131			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	4.817			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	4.333			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	1.219			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.217			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	47.247			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	8.001			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.382			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.123			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.055			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.953			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.242			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.074			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	25.827	0.033			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	19.749	0.017			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.209	0.012			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.851	0.035	0.008			
21	0.0	0.0	0.0	0.0	0.0	0.0	8.194	0.0	0.0	0.064	0.012	0.005			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.046	0.0	0.0	0.099	0.020	0.006			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.363	0.008			
24	0.0	0.0	0.0	0.0	0.0	0.0	18.077	0.0	0.0	0.001	0.102	0.010			
25	0.0	0.0	0.0	0.0	0.0	0.0	10.534	0.0	0.0	0.0 T	0.028	0.007			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.370	0.0	0.0	0.0 T	0.013	0.005			
27	0.0	0.0	0.0	0.0	0.0	0.0	7.393	0.0	0.0	0.006	0.007	0.005			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.562	0.0	0.0	0.001	0.004	0.005			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.377	0.0	0.0	0.0	0.002	0.006			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.171	0.0	0.0	0.0	0.001	0.005			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.629	0.0	0.0	0.0	0.0	0.073			
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	1.4758	0.0020	0.0	0.3218	1.5857	2.3029			
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	1.881	0.002	0.0	0.810	1.906	2.935			
STA AV	0.424	0.633	0.624	0.980	0.895	0.609	0.237	0.178	0.346	0.306	0.539	0.612			

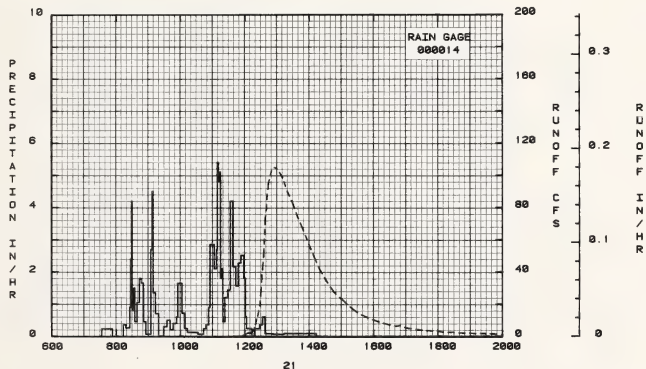
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.041108. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period.

1971 SELECTED RUNOFF EVENT					RISSEL (WACO), TEXAS					WATERSHED C				
PRECEDENT CONDITIONS					RAINFALL					RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 21, 1971														
RG 000014														
7-21	0.0	0.0	7-21	733	0.0	0.0	7-21	1140	0.0	0.0				
				743	0.2400	0.04		1142	0.0	0.0				
				753	0.2400	0.08		1144	0.0	0.0				
				813	0.0	0.08		1146	0.001	0.0				
				816	0.3600	0.11		1148	0.006	0.0				
WATERSHED CONDITIONS:														
81% pasture, all classes; 12% row grain sorghum, maturing; 2% gravel and paved roads; 5% other. Approx. 90% of other is Johnsongrass and weeds in conservation reserve, neither tilled nor grazed.														
				825	0.2571	0.14		1150	0.023	0.0				
				827	0.9000	0.17		1152	0.065	0.0				
				829	2.4000	0.25		1154	0.189	0.0				
				830	4.1998	0.32		1156	0.417	0.0				
				833	0.8000	0.36		1158	0.740	0.0				
				835	1.5000	0.41		1200	0.978	0.0001				
				839	0.4500	0.44		1202	1.384	0.0002				
				843	1.0500	0.51		1204	1.825	0.0003				
				847	1.8000	0.63		1206	2.156	0.0004				
				851	1.6500	0.74		1208	2.298	0.0005				
				855	0.4500	0.77		1210	2.376	0.0006				
				905	0.0600	0.78		1212	2.457	0.0007				
				907	2.7000	0.87		1214	2.788	0.0008				
				909	4.4999	1.02		1216	3.700	0.0010				
				913	1.3500	1.11		1218	5.415	0.0012				
				919	0.7000	1.18		1220	7.499	0.0016				
				929	0.0	1.18		1222	10.852	0.0021				
				935	0.3000	1.21		1224	12.686	0.0028				
				941	0.5800	1.26		1226	16.065	0.0036				
				947	0.2000	1.28		1228	19.114	0.0047				
				953	0.4000	1.32		1230	27.705	0.0061				
				955	0.6000	1.34		1232	38.257	0.0079				
				959	1.6500	1.45		1234	45.968	0.0104				
				1003	1.6500	1.56		1236	58.473	0.0131				
				1008	0.7200	1.62		1238	72.115	0.0169				
				1013	0.2400	1.64		1240	78.802	0.0209				
				1023	0.1200	1.66		1242	88.276	0.0259				
				1033	0.1200	1.68		1244	94.168	0.0308				
				1043	0.0600	1.69		1246	97.301	0.0366				
				1048	0.2400	1.71		1248	100.024	0.0419				
				1053	0.3600	1.74		1250	102.804	0.0480				
				1055	0.9000	1.77		1252	104.968	0.0626				
				1059	2.8500	1.96		1300	103.799	0.0780				
				1103	2.8500	2.15		1305	101.652	0.0924				
				1107	2.1000	2.29		1310	98.736	0.1065				
				1109	2.7000	2.38		1320	89.760	0.1336				
				1111	5.4001	2.56		1330	82.243	0.1583				
				1113	4.8000	2.72		1340	73.007	0.1901				
				1115	5.0999	2.89		1350	65.506	0.2000				
				1117	1.8000	2.95		1400	56.560	0.2176				
				1119	2.1000	3.02		1410	48.558	0.2324				
				1123	0.4500	3.05		1420	41.432	0.2453				
				1128	1.2000	3.15		1430	35.565	0.2564				
				1133	1.4800	3.27		1440	30.208	0.2656				
				1138	4.2000	3.62		1450	26.006	0.2737				
				1143	2.1600	3.80		1500	23.330	0.2808				
				1148	1.5600	3.93		1510	19.975	0.2869				
				1153	2.2800	4.12		1520	17.167	0.2922				
				1158	2.5200	4.33		1530	14.742	0.2968				
				1201	1.8000	4.42		1540	12.791	0.3007				
				1203	0.6000	4.44		1550	11.323	0.3042				
				1213	0.2400	4.48		1600	10.013	0.3073				
				1218	0.0	4.48		1610	8.900	0.3100				
				1223	0.2400	4.50		1620	7.881	0.3124				
				1228	0.2400	4.52		1630	6.975	0.3145				
				1233	0.3600	4.55		1640	6.189	0.3163				
				1238	0.6000	4.60		1650	6.777	0.3182				
				1253	0.0800	4.62		1700	5.057	0.3199				
				1303	0.0600	4.63		1710	4.634	0.3213				
				1313	0.0600	4.64		1730	3.812	0.3237				
				1333	0.0900	4.67		1750	3.152	0.3257				
				1413	0.0900	4.73		1810	2.667	0.3274				
								1830	2.288	0.3288				
								1850	1.855	0.3300				
								1910	1.614	0.3310				

NOTES: To convert runoff in CFS to I8/HR, multiply by 0.001713.

1971 SELECTED RUNOFF EVENT						RIBESL (WACO), TEXAS WATERSHED C					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JULY 21, 1971 (CONTINUED)											
						7-21	1940	1.331	0.3323		
							2010	1.065	0.3333		
							2040	0.866	0.3341		
							2110	0.669	0.3348		
							2140	0.542	0.3353		
							2210	0.467	0.3357		
							2240	0.393	0.3361		
							2310	0.343	0.3364		
							2340	0.300	0.3367		
							2400	0.280	0.3369		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001713.



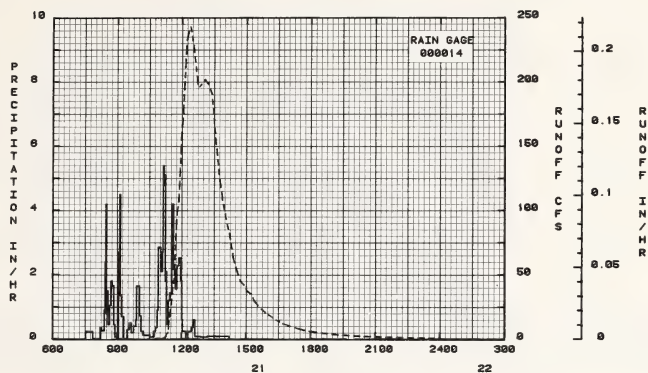
EVENT OF JULY 21, 1971  
RIBESL (WACO), TEXAS WATERSHED C





1971 SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS WATERSHED D			
ANTECEDENT CONDITIONS				RAINFALL			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day
				RUNOFF			
				Time	Rate	Acc.	
				of Day	(cfs)	(inches)	
EVENT OF				JULY 21, 1971 (CONTINUED)			
7-21	1013	0.2400	1.64	7-21	1148	99.000	0.0160
	1023	0.1200	1.66		1150	103.000	0.0192
	1033	0.1200	1.68		1152	109.000	0.0222
	1043	0.0600	1.69		1154	115.000	0.0258
	1048	0.2400	1.71		1156	133.000	0.0293
	1053	0.3600	1.74		1158	151.000	0.0338
	1055	0.9000	1.77		1200	161.000	0.0387
	1059	2.8500	1.96		1202	168.000	0.0433
	1103	2.8500	2.15		1204	178.000	0.0487
	1107	2.1000	2.29		1206	190.000	0.0538
	1109	2.7000	2.38		1208	200.000	0.0599
	1111	5.4001	2.56		1210	218.000	0.0657
	1113	4.8000	2.72		1212	225.000	0.0727
	1115	5.0999	2.89		1214	233.000	0.0791
	1117	1.8000	2.95		1219	240.000	0.0973
	1119	2.1000	3.02		1224	243.000	0.1150
	1123	0.4500	3.05		1236	223.000	0.1500
	1128	1.2000	3.15		1244	196.000	0.1809
	1133	1.4400	3.27		1249	196.000	0.1960
	1138	4.2000	3.62		1254	198.000	0.2104
	1143	2.1600	3.80		1304	202.000	0.2404
	1148	1.5600	3.93		1314	198.000	0.2697
	1153	2.2000	4.12		1324	190.000	0.2988
	1158	2.5200	4.33		1334	155.000	0.3247
	1201	1.8000	4.42		1339	143.000	0.3356
	1203	0.6000	4.44		1344	128.000	0.3455
	1213	0.2400	4.48		1349	118.000	0.3549
	1218	0.0	4.48		1354	108.000	0.3632
	1223	0.2400	4.50		1404	93.000	0.3783
	1228	0.2400	4.52		1414	81.000	0.3911
	1233	0.3600	4.55		1424	63.000	0.4019
	1238	0.6000	4.60		1434	53.000	0.4106
	1253	0.0800	4.62		1444	45.000	0.4178
	1303	0.0600	4.63		1454	42.000	0.4243
	1313	0.0600	4.64		1504	37.000	0.4302
	1333	0.0900	4.67		1514	35.000	0.4355
	1413	0.0900	4.73		1524	29.321	0.4403
					1534	25.779	0.4444
					1544	22.896	0.4480
					1554	20.463	0.4513
					1604	18.793	0.4542
					1614	16.655	0.4568
					1624	14.585	0.4591
					1634	13.365	0.4612
					1644	12.017	0.4631
					1704	9.862	0.4664
					1724	8.136	0.4691
					1744	6.757	0.4713
					1804	5.618	0.4732
					1834	4.431	0.4754
					1904	3.551	0.4772
					1934	2.820	0.4786
					2004	2.315	0.4797
					2034	1.951	0.4807
					2104	1.638	0.4815
					2134	1.372	0.4822
					2204	1.121	0.4828
					2234	0.962	0.4833
					2304	0.829	0.4837
					2400	0.622	0.4843

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000893.



EVENT OF JULY 21, 1971  
BIRSEL (WACO), TEXAS WATERSHED D



1971 MEAN DAILY DISCHARGE (cfs)											
JUL				AUG				SEP			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.02
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.02	0.0	0.0	1.09
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.70	0.0	0.0	36.14
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0	38.23
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.0	12.34
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	2.97
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	460.26
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	84.23
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.09
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	1.48
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.74
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	1.28
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	2.72
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.90
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	73.77
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	326.68
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24
20	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	40.84	0.40
21	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.93	0.0	0.0	0.12
22	0.0	0.0	0.0	0.00	0.0	0.0	0.0	1.60	0.0	0.0	0.05
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	1.28
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.73	0.0	0.0	0.47
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.83	0.0	0.0	0.17
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.84	0.0	0.0	0.08
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.99	0.0	0.0	0.04
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.07	0.0	0.0	0.03
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.26	0.0	0.0	0.03
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.58	0.0	0.0	0.02
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.13	0.0	0.0	0.92
MEAN	0.0	0.0	0.0	0.085	0.0	0.0	13.548	0.334	0.0	1.339	13.530
INCHES	0.0	0.0	0.0	0.007	0.0	0.0	2.282	0.056	0.0	0.226	2.206
STA AV	0.655	0.776	0.723	0.700	0.702	0.929	0.290	0.176	0.320	0.196	0.596

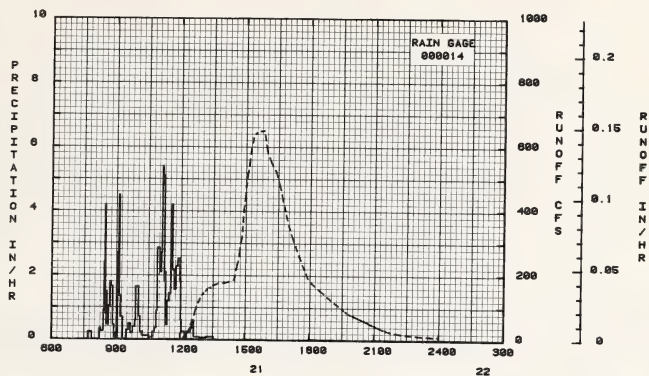
NOTES: To convert mean daily discharge in CPS to 15/DA, multiply by 0.005434. Records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. STA AV based on 19 yr period.

1971 SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS WATERSHED G					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 21, 1971											
RG 000014			RG 000014								
7-21	0.04	0.0	7-21	743	0.0	0.0	7-21	1100	0.0	0.0	
				753	0.2400	0.04		1105	0.0	0.0	
				813	0.0	0.04		1110	0.0	0.0	
				818	0.3600	0.07		1115	0.001	0.0	
				825	0.2571	0.10		1120	0.002	0.0	
WATERSHED CONDITIONS:											
42% pasture, all classes;			827	0.9000	0.13		1125	0.005	0.0		
2% tilled, but not planted;			829	2.4000	0.21		1130	0.008	0.0		
3% corn, maturing; 6% fall			830	4.1998	0.28		1135	0.014	0.0		
planted small grain, harvested			833	0.8000	0.32		1140	0.024	0.0		
to 10 inches high; 2% gravel			835	1.5000	0.37		1145	0.036	0.0		
sorghum, maturing; 10% cotton,											
blooming; 2% gravel and paved			839	0.4500	0.40		1150	0.068	0.0		
roads; 24% other. Approx. 90%			843	1.0500	0.47		1155	0.143	0.0		
of other is Johnsongrasses and			847	1.8000	0.59		1200	0.273	0.0		
weeds in conservation reserve,			851	1.6500	0.70		1205	1.213	0.0		
neither tilled nor grazed.			855	0.4500	0.73		1210	6.886	0.0001		
			905	0.0600	0.74		1215	12.785	0.0003		
			907	2.7000	0.83		1220	18.513	0.0006		
			909	4.4999	0.98		1225	31.199	0.0011		
			913	1.3500	1.07		1230	48.000	0.0019		
			919	0.7000	1.14		1235	61.000	0.0029		
			929	0.0	1.14		1240	80.000	0.0042		
			935	0.3000	1.17		1245	101.000	0.0060		
			941	0.5000	1.22		1250	115.000	0.0080		
			947	0.2000	1.24		1255	128.000	0.0103		
			953	0.4000	1.28		1300	135.000	0.0129		
			955	0.6000	1.30		1305	145.000	0.0155		
			959	1.6500	1.41		1310	151.000	0.0182		
			1003	1.6500	1.52		1315	157.000	0.0212		
			1008	0.7200	1.58		1320	161.000	0.0242		
			1013	0.2400	1.60		1325	161.000	0.0272		

NOTES: To convert runoff in CPS to 15/HR, multiply by 0.0002264.

1971 SELECTED RUNOFF EVENT							EISELE (WACO), TEXAS		WATERSHED C		
PRECIPITATION CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Date	Time	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	Mo-Day	of Day	(inches)
EVENT OF JULY 21, 1971 (CONTINUED)											
7-21	1023	0.1200	1.62	7-21	1330	168.000	0.0304				
	1033	0.1200	1.64		1345	175.000	0.04001				
	1043	0.0600	1.65		1400	176.000	0.0500				
	1048	0.2400	1.67		1415	180.000	0.0601				
	1053	0.3600	1.70		1430	186.000	0.0705				
	1055	0.9000	1.73		1435	219.000	0.0783				
	1059	2.8500	1.92		1440	244.000	0.0786				
	1103	2.6500	2.11		1445	285.000	0.0837				
	1107	2.1000	2.25		1450	322.000	0.0893				
	1109	2.7000	2.34		1455	402.000	0.0960				
	1111	5.4001	2.52		1500	457.999	0.1044				
	1113	4.8000	2.68		1505	512.000	0.1134				
	1115	5.0999	2.85		1510	548.000	0.1232				
	1117	1.8000	2.91		1515	598.000	0.1343				
	1119	2.1000	2.98		1520	628.000	0.1457				
	1123	0.4500	3.01		1525	640.000	0.1575				
	1128	1.2000	3.11		1530	644.000	0.1700				
	1133	1.4400	3.23		1540	649.000	0.1940				
	1138	4.2000	3.38		1550	650.000	0.2187				
	1143	2.1600	3.76		1600	580.000	0.2421				
	1148	1.5600	3.89		1615	540.000	0.2738				
	1153	2.2800	4.08		1625	519.999	0.2935				
	1158	2.5200	4.29		1635	480.000	0.3125				
	1201	1.8000	4.38		1645	430.000	0.3296				
	1203	0.6000	4.40		1700	356.000	0.3520				
	1213	0.2400	4.44		1715	308.000	0.3707				
	1218	0.0	4.44		1730	260.000	0.3867				
	1223	0.2400	4.46		1745	218.000	0.4002				
	1228	0.2400	4.48		1755	190.000	0.4078				
	1233	0.3600	4.51		1805	176.000	0.4108				
	1238	0.6000	4.56		1815	167.000	0.4213				
	1253	0.0800	4.58		1830	151.000	0.4303				
	1303	0.0600	4.59		1840	143.000	0.4358				
	1313	0.0600	4.60		1850	133.000	0.4410				
	1333	0.0900	4.63		1900	123.000	0.4459				
					1910	114.000	0.4503				
					1920	105.000	0.4545				
					1930	96.000	0.4583				
					1935	92.000	0.4600				
					1940	88.000	0.4617				
					1945	84.000	0.4634				
					1950	80.000	0.4649				
					1955	77.000	0.4664				
					2000	75.000	0.4679				
					2005	72.000	0.4693				
					2010	70.000	0.4706				
					2015	67.000	0.4719				
					2020	65.000	0.4731				
					2025	62.000	0.4743				
					2030	60.000	0.4755				
					2035	57.000	0.4766				
					2040	55.000	0.4776				
					2045	51.667	0.4786				
					2050	49.060	0.4795				
					2055	46.063	0.4804				
					2100	43.450	0.4813				
					2105	40.269	0.4821				
					2110	38.269	0.4828				
					2115	36.150	0.4835				
					2120	33.958	0.4842				
					2125	31.894	0.4848				
					2130	30.480	0.4854				
					2135	28.014	0.4859				
					2140	25.263	0.4864				
					2145	23.402	0.4869				
					2200	20.257	0.4881				
					2215	17.836	0.4892				
					2230	15.989	0.4902				
					2300	12.717	0.4918				
					2330	10.548	0.4931				
					2400	8.924	0.4942				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.



EVENT OF JULY 21, 1971  
RIESEL (WACO), TEXAS WATERSHED G

## RIESEL (WACO), TEXAS WATERSHED W-1

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 174.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED W-1		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1971	0.00	1.56	0.26	3.29	2.26	1.81	10.18	3.48	3.96	4.63	7.16	40.52			
STA AV	2.18	2.75	2.56	3.98	4.20	3.24	1.75	2.12	2.57	2.68	2.98	2.67	33.70		
Q	0.866	0.635	0.795	1.908	1.183	0.600	0.123	0.100	0.133	0.178	0.428	0.594	6.130		
ANNUAL MAXIMUM DISCHARGE (cfs) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
	Maximum Discharge			Maximum Volume for Selected Time Interval											
	Date	Rate	1 Hour	Date	Vol.	2 Hours	Date	Vol.	1 Day	2 Days	5 Days	8 Days	Date	Vol.	Date
1971	12-9	1.382	12-9	1.005	12-9	1.367	12-9	1.989	12-9	2.365	12-9	2.965	12-8	3.180	12-2
MAXIMUMS FOR PERIOD OF RECORD															
	5-1	4.510	5-1	2.990	5-1	5.570	5-1	6.910	5-1	7.050	4-30	9.200	4-29	11.060	
	1944		1944		1944		1944		1944		1944		1944		

NOTES: Watershed conditions: 11% cotton; 85% pasture; 3% roads; and 1% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve; but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.6-6 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gauges 75A, 89, W-2, and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-1		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.03E	0.03E	0.0	0.0	0.0	0.0	0.38	0.04E	0.0	0.0	1.05			
3	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0			
4	0.0	0.14	0.0	0.0 E	0.0	0.0	0.0	1.44	0.0	0.20	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.10E	0.0	0.02E	0.0	0.0			
6	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.01E	0.0	0.47			
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.24	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.52			
9	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.06E	0.0	3.38			
10	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.02			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0			
12	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.15			
15	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.07E	0.0	0.0			
17	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	3.93	0.03E			
18	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.28	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.02E	0.50	0.0	0.0			
20	0.0	0.0	0.0	0.79	0.40	0.0	0.0	0.0	1.64	0.0	0.0	0.0			
21	0.0	0.16	0.0	0.0	0.0	0.60	3.09	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.04E	0.0	0.05E	0.0	0.82	0.0	0.41	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.01E	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.14E	0.0	1.93	0.0	1.21	0.0	0.0	0.0			
25	0.0	1.07	0.09E	0.0	0.0	0.0	1.53	0.01E	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.04E	0.32	1.19	0.0	0.0	0.15	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.03E	0.61	0.0	0.0	0.0	0.0	0.00E	0.04E			
29	0.0	0.0	0.0	0.23	0.0	0.0	1.32	0.0	0.0	0.0	0.0	0.01E			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.37	0.0	0.0	0.0	0.33			
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.40			
TOTAL	0.00	1.56	0.26	3.29	2.26	1.81	10.14	3.48	2.38	3.96	4.63	7.16			
STA AV	2.18	2.75	2.56	3.98	4.20	3.24	1.75	2.12	2.57	2.68	2.98	2.67			

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges 75A, 89, W-2, and W-5A. Records began July 1937; part-year amounts not included in averages. STA AV based on 34 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)						KIESEL (WACO), TEXAS				WATERSHED #=1		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.669
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.059
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.857	0.0	0.0	0.0	0.013
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.123	0.0	0.0	0.0	1.166
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	1.222
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.161
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.037
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.526
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.739
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.043
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.017
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.011
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.052	0.011	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.896	0.009	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.010	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.776	0.002	0.011
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.002	0.008
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.007
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.010
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.011
25	0.0	0.0	0.0	0.0	0.0	0.0	0.150	0.0	0.0	0.0	0.003	0.014
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.003	0.014
27	0.0	0.0	0.0	0.0	0.0	0.0	0.198	0.0	0.0	0.0	0.003	0.014
28	0.0	0.0	0.0	0.0	0.0	0.0	0.075	0.0	0.0	0.0	0.003	0.013
29	0.0	0.0	0.0	0.0	0.0	0.0	1.651	0.0	0.0	0.0	0.003	0.013
30	0.0	0.0	0.0	0.0	0.0	0.0	0.479	0.0	0.0	0.0	0.004	0.055
31	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.029
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0827	0.0972	0.0	0.0573	0.4333	0.8697
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.350	0.412	0.0	0.243	1.778	3.688
STA AV	0.486	0.615	0.735	1.008	1.183	0.600	0.123	0.100	0.133	0.178	0.428	0.544

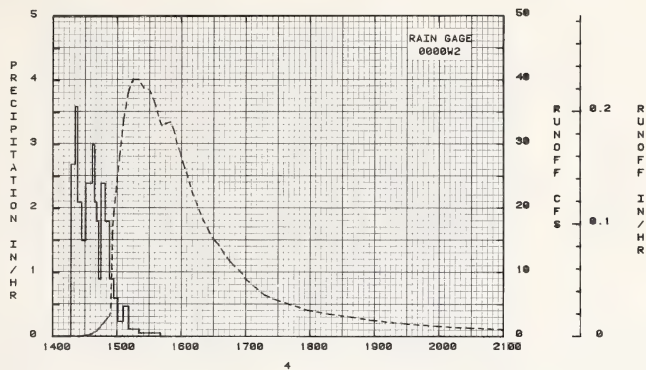
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.136791. Records began July 1937; part-year amounts not included in averages. STA AV based on 34 yr period.

1971 SELECTED RUNOFF EVENT						KIESEL (WACO), TEXAS				WATERSHED #=1		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 4, 1971												
8- 4	RG 0000W2	0.0	8- 4	RG 0000W2			8- 4	1420	0.060	0.0		
				1417	0.0	0.0		1421	0.076	0.0		
				1421	2.6999	0.18		1423	0.069	0.0		
				1423	3.6003	0.30		1424	0.069	0.0		
				1427	2.1000	0.44		1425	0.070	0.0		
				1429	1.5001	0.49		1426	0.098	0.0		
WATERSHED CONDITIONS:												
	11% row grain sorghum, mature;			1431	1.4996	0.54		1427	0.124	0.0		
	85% pasture, Bermuda grass, mature;			1435	2.4001	0.70		1428	0.161	0.0		
	good cover, moderately			1437	2.4001	0.78		1429	0.217	0.0		
	grazed; 3% gravel roads; 1%			1439	3.0001	0.88		1430	0.241	0.0		
	Johnsongrass and weeds, not			1441	2.0998	0.95		1432	0.280	0.0		
	tilled or grazed.											
				1443	1.7999	1.01		1434	0.316	0.0001		
				1445	0.9000	1.04		1435	0.358	0.0001		
				1447	2.4001	1.12		1436	0.454	0.0001		
				1449	2.4000	1.20		1437	0.536	0.0001		
				1451	1.8000	1.26		1438	0.684	0.0002		
				1453	1.8004	1.32		1439	0.769	0.0003		
				1455	0.9000	1.35		1441	0.809	0.0004		
				1457	0.9000	1.38		1442	1.084	0.0005		
				1501	0.5999	1.42		1443	1.251	0.0006		
				1506	0.2401	1.44		1444	1.465	0.0007		
				1511	0.4799	1.48		1445	1.731	0.0009		
				1521	0.1200	1.50		1446	1.877	0.0011		
				1541	0.0600	1.52		1447	2.050	0.0013		
				1551	0.0	1.52		1448	2.266	0.0015		
								1449	2.476	0.0018		
								1450	2.667	0.0020		
								1451	2.892	0.0022		
								1452	3.093	0.0025		
								1453	3.372	0.0029		
								1454	3.728	0.0032		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.

1971 SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS				
PRECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF AUGUST 4, 1971 (CONTINUED)									
8- 4							1855	9.116	0.0038
							1856	16.611	0.0089
							1857	19.399	0.0069
							1858	21.082	0.0087
							1859	22.749	0.0107
							1500	24.254	0.0133
							1501	25.937	0.0155
							1502	27.681	0.0179
							1503	28.981	0.0204
							1504	30.625	0.0237
							1505	32.302	0.0265
							1506	33.778	0.0294
							1507	34.880	0.0325
							1508	35.916	0.0364
							1510	37.857	0.0430
							1512	39.007	0.0507
							1515	40.253	0.0622
							1520	40.170	0.0810
							1525	38.682	0.0995
							1530	38.595	0.1185
							1535	36.639	0.1361
							1540	33.699	0.1525
							1542	32.921	0.1592
							1545	33.309	0.1608
							1550	33.543	0.1884
							1553	32.379	0.1939
							1556	30.098	0.2022
							1559	28.833	0.2107
							1602	27.009	0.2188
							1605	25.583	0.2264
							1610	22.614	0.2377
							1615	20.494	0.2483
							1620	18.389	0.2574
							1625	16.731	0.2656
							1630	15.190	0.2734
							1635	14.327	0.2803
							1640	12.930	0.2867
							1645	11.798	0.2928
							1650	10.961	0.2981
							1654	10.298	0.3021
							1657	9.799	0.3050
							1700	8.974	0.3077
							1708	7.829	0.3141
							1718	6.432	0.3208
							1728	5.727	0.3266
							1738	5.194	0.3318
							1758	4.097	0.3406
							1818	3.483	0.3478
							1838	3.029	0.3540
							1858	2.487	0.3592
							1928	1.957	0.3655
							1958	1.563	0.3705
							2028	1.284	0.3746
							2058	1.073	0.3780
							2128	0.889	0.3808
							2158	0.820	0.3832
							2228	0.734	0.3854
							2258	0.645	0.3874
							2328	0.550	0.3891
							2400	0.467	0.3907

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.



## RIESEL (WACO), TEXAS WATERSHED W-2

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 130.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS				WATERSHED W-2													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971	P	0.0	1.41	0.25	3.21	2.01	0.62	9.84	4.48	2.48	3.99	4.65	7.07	41.00																	
	Q	0.001	0.0	0.0	0.0	0.0	0.0	0.298	1.142	0.101	0.477	2.058	4.288	8.364																	
STA AV	P	2.15	2.73	2.48	3.99	4.16	3.19	1.71	2.22	2.59	2.67	2.95	2.63	33.46																	
	Q	0.576	0.741	0.846	1.059	1.207	0.564	0.122	0.090	0.112	0.173	0.442	0.667	6.559																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge																															
Maximum Volume for Selected Time Interval																															
Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days																	
Date	Date	Date	Date	Date	Vol.	Date	Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1971	12-9	1.403	12-9	1.047	12-9	1.416	12-9	2.028	12-9	2.388	12-9	2.923	12-8	3.119	12-2	3.827															
MAXIMUMS FOR PERIOD OF RECORD																															
5-1		4.830		5-1		2.860		5-1		5.400		5-1		6.910		5-1		6.970		5-1		7.120		4-30		9.260		4-29		10.960	
1944				1944				1944				1944				1944				1944				1944				1944			

NOTES: Watershed conditions: 56% pasture; 26% row grain sorghum; 9% fall planted small grain, largely oats; 3% cotton; 5% gravel and paved roads; 1% other. Approximately 50% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. Cropland farmed on contour, not terraced. Modified conservation applied 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges W-2, W-4, W-5, and W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED W-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.03E	0.02E	0.0	0.0	0.0	0.0	0.39	0.04E	0.0	0.0	1.02			
3	0.0 E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0			
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	2.02	0.0	0.20	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.15E	0.0	0.02E	0.0	0.0	0.68	
6	0.0	0.0	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.01E	0.0	0.41			
7	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.25	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.47			
9	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.06E	0.0	3.50			
10	0.0	0.0	0.0	0.0	0.0	1.08	0.0	0.0	0.0	0.0	0.0	0.04			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.78	0.01E	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.15			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	2.04	0.0	0.0	0.0	0.0	0.06E	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	3.96	0.03E			
18	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.31	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.02E	0.99	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.75	0.30	0.0	0.0	0.0	1.54	0.0	0.0			
21	0.0	0.15	0.0	0.0	0.0	0.0	0.91	2.57	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.05E	0.0	0.01E	0.0	0.0	0.80	0.0	0.38			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.02E	0.0			
24	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	2.31	0.0	1.22	0.0	0.0			
25	0.0	0.97	0.08E	0.0	0.0	0.0	0.0	1.25	0.00E	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.04E	0.37	1.19	0.0	0.0	0.16	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.57	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.20	0.0	0.0	1.36	0.0	0.0	0.0	0.0	0.01E			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.75	0.0	0.0	0.0	0.32			
31	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.02E	0.0	0.0	0.0	0.37			
TOTAL	0.0	1.41	0.25	3.21	2.01	1.62	9.84	4.48	2.48	3.99	4.65	7.07			
STA AV	2.15	2.73	2.48	3.99	4.16	3.19	1.71	2.22	2.59	2.67	2.95	2.63			

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges W-2, W-4, W-5, and W-6. STA AV based on 38 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS WATERSHED W-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.022	0.006	0.004	0.061			
2	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.026	0.021	0.008	0.040	1.156			
3	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.018	0.022	0.030	0.145			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.290	0.014	0.035	0.029	0.079			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.155	0.010	0.018	0.026	1.524			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.013	0.013	0.030	0.939			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.058	0.014	0.009	0.028	0.189			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.027	0.012	0.031	0.139			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018	0.024	0.011	0.033	15.948			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017	0.020	0.007	0.029	1.100			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017	0.016	0.006	0.024	0.114			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.070	0.017	0.007	0.026	0.099			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.077	0.015	0.008	0.028	0.097			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.014	0.009	0.027	0.133			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029	0.014	0.010	0.026	0.113			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026	0.013	0.012	0.025	0.098			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.010	0.009	0.022	0.099			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.010	0.013	1.953	0.096			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.006	0.037	0.055	0.100			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.009	1.872	0.055	0.098			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.011	0.042	0.056	0.092			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018	0.054	0.032	0.082	0.093			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.022	0.033	0.091	0.093			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018	0.060	0.038	0.063	0.095			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.021	0.042	0.040	0.065			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.019	0.047	0.064	0.095			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.097	0.020	0.016	0.067	0.062			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.039	0.016	0.010	0.067	0.090			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.076	0.015	0.007	0.043	0.060			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.357	0.036	0.007	0.043	0.062			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.036	0.043	0.043	0.101			
MEAN	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0525	0.2012	0.0185	0.0840	0.3746	0.7555		
INCHES	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.298	1.142	0.477	2.058	4.288			
STA W	0.576	0.781	0.846	1.059	1.207	0.564	0.122	0.090	0.112	0.173	0.462	0.667			

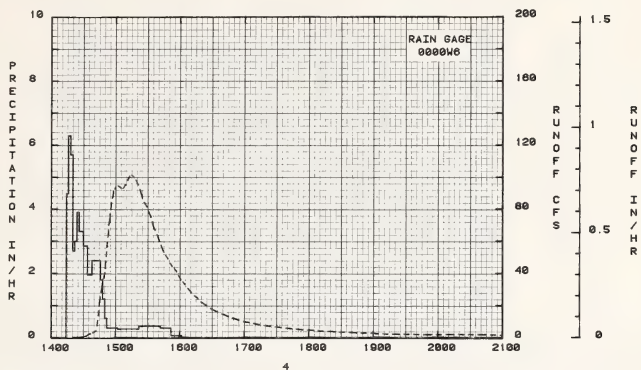
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.183090. Records began July 1937. STA W based on 34 yr period.

1971 SELECTED RUNOFF EVENT												RIESEL (WACO), TEXAS WATERSHED W-2			
WATERSHED CONDITIONS						RAINFALL						RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 4, 1971															
8-4	0.0	0.002	8-4	1414	0.0	0.0	8-4	1420	0.011	0.0					
				1416	4.5002	0.15		1421	0.019	0.0					
				1418	0.2998	0.36		1422	0.040	0.0					
				1420	5.7000	0.55		1423	0.059	0.0					
				1422	2.7004	0.64		1424	0.098	0.0					
				1424	2.9997	0.74		1425	0.154	0.0					
				1426	3.9002	0.87		1426	0.195	0.0					
				1430	3.3000	1.09		1427	0.238	0.0					
				1434	2.8500	1.28		1428	0.324	0.0					
				1438	1.9498	1.41		1429	0.423	0.0					
				1442	2.4001	1.57		1430	0.544	0.0001					
				1446	2.4001	1.73		1431	0.668	0.0002					
				1448	1.8000	1.79		1432	0.874	0.0003					
				1450	1.1998	1.83		1433	1.168	0.0004					
				1452	0.6001	1.85		1434	1.473	0.0006					
				1502	0.3000	1.90		1435	2.022	0.0008					
				1522	0.2700	1.99		1436	2.487	0.0011					
				1542	0.3600	2.11		1437	2.578	0.0014					
				1552	0.3000	2.16		1439	3.044	0.0022					
				1602	0.0601	2.17		1440	3.338	0.0026					
				1607	0.0	2.17		1441	3.919	0.0030					
								1442	4.497	0.0036					
								1443	7.714	0.0043					
								1444	13.706	0.0056					
								1445	21.082	0.0082					
								1446	25.583	0.0110					
								1447	30.173	0.0143					
								1448	34.013	0.0181					
								1449	36.801	0.0234					
								1450	40.504	0.0280					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007629.

1971 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED W-2				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 4, 1971 (CONTINUED)										
							8- 4	1451	47.673	0.0333
								1452	56.683	0.0395
								1453	64.062	0.0485
								1454	71.563	0.0566
								1455	77.336	0.0655
								1456	84.040	0.0751
								1457	87.358	0.0879
								1458	91.062	0.0985
								1459	92.651	0.1094
								1500	93.906	0.1233
								1502	94.709	0.1458
								1505	93.221	0.1822
								1507	93.221	0.2044
								1509	95.398	0.2297
								1511	98.175	0.2528
								1513	100.512	0.2794
								1515	101.334	0.3065
								1517	99.809	0.3305
								1519	98.059	0.3570
								1521	95.168	0.3800
								1523	91.289	0.4050
								1525	86.913	0.4262
								1527	83.821	0.4491
								1529	81.420	0.4688
								1531	78.189	0.4902
								1533	74.902	0.5084
								1535	70.018	0.5278
								1537	66.864	0.5441
								1539	63.566	0.5616
								1541	60.234	0.5764
								1543	56.494	0.5921
								1545	53.214	0.6068
								1547	51.189	0.6192
								1549	49.015	0.6326
								1551	46.258	0.6440
								1553	44.424	0.6562
								1555	42.960	0.6666
								1557	41.008	0.6779
								1559	38.513	0.6874
								1601	36.157	0.6974
								1603	34.485	0.7058
								1605	32.921	0.7148
								1608	30.323	0.7271
								1611	27.734	0.7375
								1614	25.866	0.7479
								1617	24.185	0.7576
								1620	22.076	0.7666
								1625	19.655	0.7797
								1630	17.584	0.7919
								1635	15.895	0.8024
								1640	14.441	0.8119
								1645	13.205	0.8210
								1650	11.904	0.8289
								1655	10.704	0.8360
								1700	9.799	0.8427
								1710	8.545	0.8542
								1720	7.355	0.8644
								1730	6.444	0.8732
								1740	5.699	0.8808
								1750	5.027	0.8877
								1800	4.460	0.8938
								1820	3.675	0.9041
								1840	3.044	0.9126
								1900	2.458	0.9197
								1920	2.029	0.9254
								1950	1.708	0.9325
								2015	1.868	0.9382
								2045	1.625	0.9449
								2115	1.331	0.9505
								2145	1.010	0.9550
								2215	0.827	0.9585
								2245	0.721	0.9615
								2315	0.630	0.9641
								2345	0.528	0.9663
								2400	0.469	0.9673

NOTES: To convert runoff in CFS to in/hr, multiply by 0.007629.



## RIESEL (WACO), TEXAS WATERSHED W-6

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 42.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS				WATERSHED W-6		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual						
1971	P	0.0	1.49	0.24	3.19	2.15	1.70	9.89	4.39	2.24	4.15	4.62	6.93	40.98					
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.273	0.668	0.0	0.083	1.310	4.173	6.507					
STA AV	P	1.98	2.67	2.37	4.02	3.88	3.31	1.68	2.29	2.70	2.84	2.98	2.49	33.21					
	Q	0.315	0.400	0.539	0.719	0.779	0.460	0.077	0.049	0.086	0.109	0.323	0.455	4.310					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
Maximum Discharge																			
Date Date 1 Hour 2 Hours 6 Hours 12 Hours 1 Day 2 Days 8 Days																			
Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.																			
1971	11-17	1.295	12- 9	1.030	12- 9	1.530	12- 8	2.290	12- 9	2.845	12- 9	3.561	12- 8	3.731	12- 2	4.007			
MAXIMUMS FOR PERIOD OF RECORD																			
6-10 3.990 8-19 2.330 4-19 2.780 5-11 3.130 5-11 3.210 3-29 4.060 11-22 5.090 8-19 9.060																			
1941 1957 1957 1957 1957 1965 1940 1957																			

NOTES: Watershed conditions: 66% row grain sorghum; 15% pasture; 10% cotton; 7% gravel and paved roads; 2% other. All of other land use is non-tilled, non-pastured land, generally in various crop acreage reduction programs. Crop land farmed on contour, not terraces. Modified conservation program since 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA RISC, Pub. 1169, p. 42.7-5 (Revised). Precipitation and runoff records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges W-2, W-4 and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

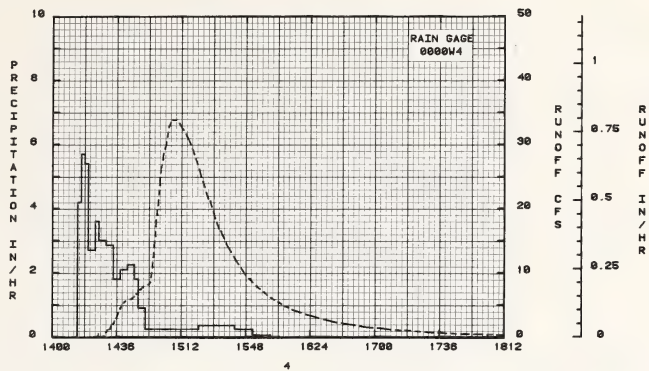
1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-6			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.02E	0.02E	0.0	0.0	0.0	0.0	0.37	0.02E	0.0	0.0	1.02	0.0	0.0	0.0	1.02
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.16	0.0	0.0	0.0	0.0	0.0	1.97	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.13E	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.66
6	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.01E	0.0	0.42	0.0	0.0	0.0	0.42
7	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.46	0.0	0.0	0.0	0.46
9	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.06E	0.0	3.41	0.0	0.0	0.0	3.41
10	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.05E
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.15
15	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	2.02	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.94	0.03E	0.0	0.0	0.03E
18	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.31	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.01E	1.09	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.77	0.32	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.15	0.0	0.0	0.0	0.85	2.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.05E	0.0	0.00E	0.0	0.0	0.0	0.73	0.0	0.38	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.14E	0.0	2.31	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	1.05	0.07E	0.0	0.0	0.0	1.19	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.03E	0.45	1.08	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.02E	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.19	0.0	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.70	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.28
31	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.35
TOTAL	0.0	1.49	0.24	3.19	2.15	1.70	9.89	4.39	2.24	4.15	4.62	6.93				
STA AV	1.98	2.67	2.37	4.02	3.88	3.31	1.68	2.29	2.70	2.84	2.98	2.49				

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges W-2, W-4, and W-5A. Records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT							RISSEL (WACO), TEXAS		WATERSHED #6	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 4, 1971 (CONTINUED)										
8- 4							1500		24.833	0.0838
							1501		26.847	0.0933
							1502		28.590	0.1035
							1503		29.663	0.1142
							1504		31.172	0.1281
							1505		32.795	0.1398
							1506		33.400	0.1519
							1507		33.791	0.1642
							1509		33.879	0.1921
							1511		33.097	0.2166
							1513		32.236	0.2435
							1515		31.257	0.2697
							1517		29.906	0.2921
							1519		28.426	0.3162
							1521		26.847	0.3364
							1522		26.090	0.3461
							1523		24.911	0.3578
							1524		24.175	0.3668
							1525		23.256	0.3755
							1526		22.238	0.3838
							1527		21.458	0.3938
							1528		21.127	0.4016
							1529		20.217	0.4092
							1530		19.286	0.4182
							1531		18.441	0.4251
							1532		17.610	0.4317
							1533		16.827	0.4380
							1534		16.458	0.4456
							1536		15.301	0.4572
							1538		14.017	0.4693
							1540		13.174	0.4793
							1542		12.140	0.4897
							1544		11.253	0.4983
							1546		10.420	0.5072
							1548		9.583	0.5145
							1550		9.012	0.5222
							1552		8.454	0.5286
							1554		7.859	0.5353
							1556		7.454	0.5409
							1558		6.983	0.5468
							1600		6.500	0.5524
							1602		6.099	0.5570
							1604		5.731	0.5619
							1606		5.438	0.5660
							1608		5.107	0.5703
							1610		4.762	0.5739
							1612		4.551	0.5777
							1614		4.241	0.5809
							1619		3.723	0.5889
							1624		3.286	0.5956
							1629		2.869	0.6015
							1634		2.524	0.6069
							1639		2.195	0.6114
							1644		1.990	0.6154
							1649		1.778	0.6192
							1654		1.532	0.6224
							1659		1.381	0.6252
							1704		1.287	0.6279
							1709		1.083	0.6302
							1720		0.913	0.6345
							1730		0.689	0.6377
							1740		0.537	0.6401
							1750		0.433	0.6420
							1800		0.368	0.6436

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.023445.



## RIESEL (WACO), TEXAS WATERSHED W-10

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 19.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-10										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
	P	0.0	1.33	0.26	3.20	1.86	1.59	9.78	4.77	2.74	3.91	4.68	7.14	41.26										
1971	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.450	1.397	0.0	0.897	2.575	4.390	5.709										
STA AV	P	2.01	2.68	2.27	3.99	3.77	3.27	1.63	2.39	2.65	2.87	2.94	2.48	32.95										
	Q	0.452	0.518	0.552	0.937	0.673	0.567	0.099	0.134	0.182	0.289	0.526	0.584	5.711										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																								
Maximum Discharge				1 Hour				2 Hours				Maximum Volume for Selected Time Interval												
Date Rate				Date Vol.				Date Vol.				1 Day				2 Days				8 Days				
Date Rate				Date Vol.				Date Vol.				Date Vol.				Date Vol.				Date Vol.				
1971	11-17	1.423	11-17	1.061	11-17	1.751	11-17	2.411	11-17	2.552	12- 9	3.208	12- 8	3.471	12- 2	4.370								
MAXIMUMS FOR PERIOD OF RECORD																								
6-10		5.010	4-19		2.310	4-19		2.550	5-11		3.000	11-22		3.330	11-22		3.530	4-24		5.160	5-19		8.290	
1941			1957			1957			1957			1940			1940			1966			1957			

NOTES: Watershed conditions: 100% Coastal Bermuda grass for pasture. Good cover, moderately grazed, terraced. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amount not included in averages. Precipitation data obtained from rain gage W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-10											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.03E	0.01E	0.0	0.0	0.0	0.0	0.41	0.05E	0.0	0.0	1.00												
3	0.0 E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0												
4	0.0	0.16	0.0	0.0 E	0.0	0.0	0.0	2.17	0.0	0.19	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.18	0.0	0.02E	0.0	0.70												
6	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.01E	0.0	0.38												
7	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.25	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.47												
9	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.06E	0.0	3.57												
10	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.04												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.75	0.02E	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.14												
15	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.0	2.05	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0												
17	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	3.99	0.03E												
18	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.32	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.02E	0.95	0.0	0.0												
20	0.0	0.0	0.0	0.72	0.29	0.0	0.0	0.0	0.0	1.43	0.0	0.0												
21	0.0	0.15	0.0	0.0	0.0	1.06	2.40	0.0	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.87	0.0	0.37	0.0												
23	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.02E	0.0	0.0												
24	0.0	0.0	0.0	0.0	0.16E	0.0	2.46	0.0	1.25	0.0	0.0	0.0												
25	0.0	0.87	0.08E	0.0	0.0	0.0	1.20	0.0 E	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.04E	0.38	1.31	0.0	0.18	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.03E	0.38	0.0	0.0	0.0	0.0 E	0.02E												
29	0.0	0.0	0.0	0.22	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.01E												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.89	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.38												
TOTAL	0.0	1.33	0.26	3.20	1.86	1.59	9.78	4.77	2.74	3.91	4.60	7.14												
STA AV	2.01	2.68	2.27	3.99	3.77	3.27	1.63	2.39	2.65	2.87	2.94	2.48												

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-6. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)						EISEL (WACO), TEXAS WATERSHED W-10						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.301
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.131	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.0	0.0	0.0	0.315
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.097
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.017
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.647
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.228
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.561	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.570	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.742	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.263	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.002
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.037	0.0	0.023	0.071	0.172
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.450	1.397	0.0	0.897	2.575	4.390
STA AV	0.452	0.518	0.552	0.937	0.873	0.567	0.099	0.134	0.182	0.289	0.526	0.584

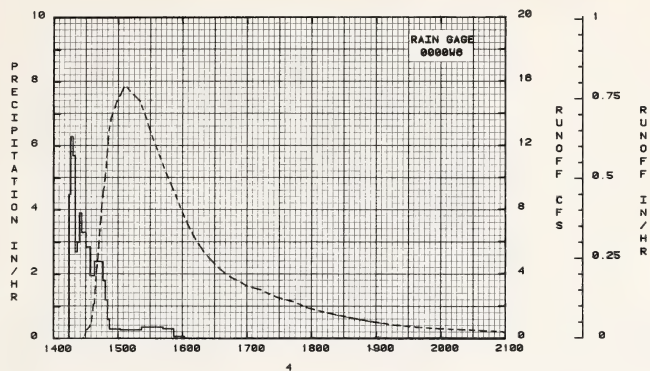
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.208206. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 29 yr period.

1971 SELECTED RUNOFF EVENT						EISEL (WACO), TEXAS WATERSHED W-10					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 4, 1971											
EG 0000W6											
8-4	0.0	0.0	8-4	1414	0.0	0.0	8-4	1425	0.009	0.0	
				1416	4.5002	0.15		1426	0.016	0.0	
				1418	6.2998	0.36		1427	0.028	0.0	
				1420	5.7000	0.55		1428	0.066	0.0	
				1422	2.7004	0.64		1429	0.188	0.0001	
WATERSHED CONDITIONS:											
100% Coastal Bermudagrass											
pasture, 4 to 6 inches high,											
good cover.											
				1424	2.9997	0.74		1430	0.423	0.0004	
				1426	3.9002	0.87		1431	0.554	0.0008	
				1430	3.3000	1.09		1432	0.637	0.0013	
				1434	2.8500	1.28		1433	0.715	0.0018	
				1438	1.9498	1.41		1434	0.829	0.0026	
				1442	2.4001	1.57		1435	1.063	0.0033	
				1446	2.4001	1.73		1436	1.442	0.0043	
				1448	1.8000	1.79		1437	2.126	0.0057	
				1450	1.1998	1.83		1438	2.179	0.0078	
				1452	0.6001	1.85		1439	3.267	0.0099	
				1502	0.3000	1.90		1440	4.282	0.0129	
				1522	0.2700	1.99		1441	5.020	0.0166	
				1542	0.3600	2.11		1442	5.799	0.0219	
				1552	0.3000	2.16		1443	6.748	0.0269	
				1602	0.0601	2.17		1444	7.605	0.0326	
				1607	0.0	2.17		1445	8.481	0.0405	
								1446	9.012	0.0474	
								1447	9.473	0.0547	
								1448	10.026	0.0624	
								1449	10.733	0.0726	
								1450	11.882	0.0815	
								1451	12.653	0.0911	
								1452	13.267	0.1013	
								1453	13.703	0.1146	
								1455	14.080	0.1365	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.050342.

1971 SELECTED RUNOFF EVENT							EISEL (WACO), TEXAS WATERSHED 4-10					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 4, 1971 (CONTINUED)												
							8- 4	1457	14.894	0.1618		
								1459	14.847	0.1845		
								1502	15.203	0.2233		
								1505	15.661	0.2628		
								1508	15.661	0.3028		
								1511	15.399	0.3394		
								1515	15.138	0.3934		
								1520	14.815	0.4552		
								1525	13.954	0.5146		
								1530	12.897	0.5727		
								1535	12.020	0.6241		
								1540	11.166	0.6720		
								1545	10.250	0.7183		
								1550	9.500	0.7591		
								1555	8.665	0.7966		
								1600	7.808	0.8322		
								1605	7.081	0.8629		
								1610	6.405	0.8907		
								1615	5.868	0.9172		
								1620	5.393	0.9405		
								1625	4.976	0.9619		
								1630	4.614	0.9826		
								1635	4.302	1.0010		
								1640	3.999	1.0181		
								1645	3.782	1.0349		
								1650	3.607	1.0502		
								1655	3.436	1.0647		
								1700	3.230	1.0791		
								1713	2.994	1.1128		
								1728	2.535	1.1476		
								1783	2.267	1.1778		
								1758	1.849	1.2037		
								1818	1.507	1.2317		
								1838	1.238	1.2549		
								1858	0.995	1.2736		
								1918	0.785	1.2885		
								1938	0.669	1.3008		
								1958	0.577	1.3112		
								2018	0.520	1.3204		
								2038	0.452	1.3286		
								2058	0.381	1.3356		
								2118	0.314	1.3414		
								2138	0.266	1.3463		
								2158	0.225	1.3504		
								2218	0.193	1.3539		
								2238	0.176	1.3570		
								2258	0.156	1.3598		
								2328	0.133	1.3634		
								2400	0.112	1.3667		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.050342.



## RISSEL (WACO), TEXAS WATERSHED Y

LOCATION: Falls Co., Texas; 17 mi. SE Waco; Brazos Basin.

AREA: 309.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										RISSEL (WACO), TEXAS		WATERSHED Y				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971 P	0.0	1.64	0.29	3.33	2.18	1.41	10.86	2.95	2.19	4.21	4.86	7.08	41.00			
	0.0	0.0	0.0	0.0	0.0	0.0	0.890	0.295	0.000	0.305	1.694	3.728	6.912			
STA AV P	2.10	2.66	2.31	3.90	3.81	3.39	1.76	2.06	2.57	2.71	2.82	2.48	32.58			
Q	0.479	0.541	0.573	0.766	0.710	0.541	0.145	0.052	0.096	0.098	0.354	0.433	4.788			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge 1 Hour 2 Hours 6 Hours 12 Hours 1 Day 2 Days 8 Days																
Date Date Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.																
1971	11-17	1.500	11-17	0.983	11-17	1.250	12- 9	1.637	12- 9	1.995	12- 9	2.580	12- 8	2.832	12- 2	3.448
MAXIMUMS FOR PERIOD OF RECORD																
4-19	2.540	4-19	2.150	4-19	2.740	4-19	3.480	4-19	3.660	3-29	3.980	11-22	4.770	4-19	9.360	
1957		1957		1957		1957		1957		1965		1940		1957		

NOTES: Watershed conditions: 58% pasture; 10% cotton; 16% fall planted small grain, largely oats; 15% row grain sorghum; 1% gravel and paved roads. Cropland terraced, contour cultivation. No change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges 69, 698, 70, 754, 84A, 89, and 8-24. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971	DAILY PRECIPITATION (inches)												RISSEL (WACO), TEXAS WATERSHED Y	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.00E	0.05E	0.0	0.0	0.0	0.0	0.37	0.03E	0.0	0.0	1.00		
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0		
4	0.0	0.15	0.0	0.0 E	0.0	0.0	0.0	0.94	0.0	0.21	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.22E	0.0	0.03E	0.0	0.68		
6	0.0	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.01E	0.0	0.51		
7	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.24	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.58		
9	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.08E	0.0	3.19		
10	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.02		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0		
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.75	0.02E	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.17		
15	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0		
17	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.12		
18	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.29	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.01E	1.03	0.0	0.0		
20	0.0	0.0	0.0	0.82	0.57	0.0	0.0	0.0	0.0	1.71	0.0	0.0		
21	0.0	0.15	0.0	0.0	0.0	0.44	3.86	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05E	0.0	0.18E	0.0	0.79	0.0	0.0	0.45	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.01E	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.13E	0.0	1.94	0.0	1.21	0.0	0.0	0.0		
25	0.0	1.10	0.08E	0.0	0.0	0.0	1.52	0.04E	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.04E	0.34	1.41	0.0	0.0	0.12	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.04E	0.52	0.0	0.0	0.0	0.00E	0.03E		
29	0.0	0.0	0.0	0.22	0.0	0.0	1.13	0.0	0.0	0.0	0.0	0.01E		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.18	0.0	0.0	0.0	0.40		
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.40		
TOTAL	0.01	1.64	0.29	3.33	2.18	1.41	10.86	2.95	2.19	4.21	4.86	7.08		
STA AV	2.10	2.66	2.31	3.90	3.81	3.39	1.76	2.06	2.57	2.71	2.82	2.48		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges 69, 698, 70, 754, 84A, 89, and 8-24. Records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 30 yr period. Estimate codes may indicate that non-significant event totals are included.

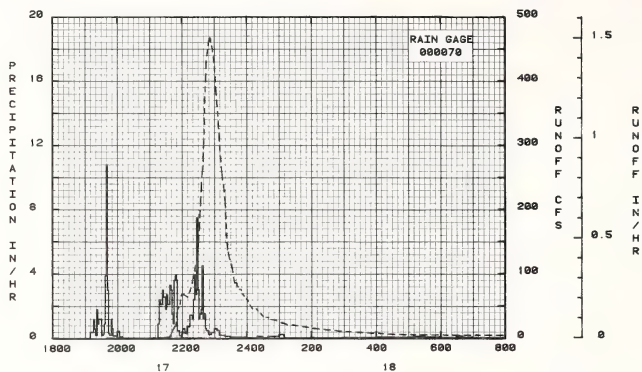


1971 SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS			WATERSHED Y		
ANTECEDENT CONDITIONS					RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)										
11-17	2134	2.6993	1.71	11-17	2124	0.804	0.0018			
	2136	2.1007	1.78		2126	0.975	0.0019			
	2138	2.0993	1.85		2128	1.018	0.0020			
	2140	3.3008	1.96		2130	1.238	0.0021			
	2142	2.9995	2.06		2132	1.492	0.0022			
	2144	1.5005	2.11		2134	1.767	0.0024			
	2146	0.8998	2.14		2136	2.339	0.0026			
	2148	3.6007	2.26		2138	2.956	0.0029			
	2150	3.8993	2.39		2139	4.126	0.0031			
	2152	3.6007	2.51		2140	5.849	0.0034			
	2156	0.4500	2.54		2141	8.471	0.0038			
	2200	0.1501	2.55		2142	10.702	0.0044			
	2202	0.2999	2.56		2143	12.017	0.0050			
	2204	0.6000	2.58		2144	14.169	0.0057			
	2206	0.5998	2.60		2145	15.324	0.0066			
	2210	0.3001	2.62		2146	16.897	0.0074			
	2215	0.7199	2.68		2147	17.794	0.0083			
	2220	1.4402	2.80		2148	18.632	0.0092			
	2222	1.2001	2.84		2149	21.528	0.0105			
	2224	2.3995	2.92		2150	24.917	0.0117			
	2226	3.9011	3.05		2151	32.705	0.0131			
	2228	2.6993	3.14		2152	40.117	0.0149			
	2230	7.4984	3.39		2153	45.153	0.0176			
	2232	3.0009	3.49		2155	48.502	0.0223			
	2234	1.1995	3.53		2157	52.942	0.0280			
	2236	1.5005	3.58		2158	59.427	0.0308			
	2238	1.7995	3.64		2159	65.758	0.0339			
	2240	4.5009	3.79		2201	68.547	0.0415			
	2242	1.2000	3.83		2203	68.794	0.0464			
	2244	1.5005	3.88		2204	71.203	0.0527			
	2246	0.5995	3.90		2206	66.478	0.0594			
	2250	0.4500	3.93		2211	63.634	0.0765			
	2255	0.2401	3.95		2214	71.169	0.0875			
	2300	0.3599	3.98		2217	78.112	0.0987			
	2305	0.6001	4.03		2220	88.176	0.1133			
	2310	0.8799	4.07		2222	96.920	0.1226			
	2320	0.1800	4.10		2224	104.931	0.1340			
	2330	0.1200	4.12		2226	113.597	0.1450			
	2340	0.0601	4.13		2228	122.210	0.1583			
	2400	0.0600	4.15		2230	135.560	0.1728			
11-18	20	0.0	4.15		2231	145.939	0.1799			
	30	0.1200	4.17		2232	159.453	0.1876			
	40	0.0	4.17		2233	172.224	0.1959			
	50	0.1200	4.19		2234	190.715	0.2073			
	100	0.1199	4.21		2235	213.019	0.2174			
	110	0.2401	4.25		2236	229.474	0.2285			
	200	0.0	4.25		2237	242.242	0.2403			
	300	0.0	4.25		2238	254.964	0.2559			
	400	0.0300	4.28		2239	267.864	0.2690			
	430	0.0600	4.31		2240	281.198	0.2828			
	510	0.0300	4.33		2241	310.094	0.2976			
	530	0.0900	4.36		2242	335.298	0.3178			
	600	0.0600	4.39		2243	369.127	0.3354			
	630	0.0200	4.40		2244	391.166	0.3544			
	640	0.1200	4.42		2245	411.969	0.3796			
	700	0.0300	4.43		2246	431.635	0.4008			
					2248	447.742	0.4449			
					2250	459.991	0.4961			
					2252	467.372	0.5426			
					2253	467.372	0.5719			
					2254	461.580	0.5952			
					2256	454.989	0.6412			
					2258	445.470	0.6920			
					2300	429.051	0.7413			
					2302	406.259	0.7832			
					2304	384.990	0.8278			
					2306	360.216	0.8652			
					2308	333.120	0.9043			
					2310	306.269	0.9364			
					2312	281.477	0.9696			
					2314	260.438	0.9968			
					2316	246.012	1.0254			
					2318	234.819	1.0495			
					2320	217.404	1.0750			
					2321	202.875	1.0855			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.003210.

WHEEL (WACO), TEXAS WATERSHED									
1971 SELECTED RUNOFF EVENTS									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)									
11-17						2322		185.450	1.0952
						2323		162.879	1.1061
						2324		145.054	1.1138
						2325		136.914	1.1209
						2326		133.380	1.1277
						2329		122.210	1.1485
						2332		114.850	1.1678
						2335		101.440	1.1854
						2338		85.395	1.2006
						2341		85.829	1.2135
						2344		79.475	1.2270
						2347		75.304	1.2396
						2350		75.304	1.2519
						2353		67.811	1.2636
						2356		64.690	1.2736
						2400		61.107	1.2878
11-18						3		56.917	1.2967
						8		51.132	1.3055
						11		45.790	1.3183
						18		45.425	1.3355
						21		42.234	1.3426
						26		37.681	1.3531
						31		33.938	1.3630
						36		32.208	1.3717
						41		31.785	1.3801
						46		28.812	1.3885
						56		26.905	1.4032
						106		23.484	1.4168
						116		21.006	1.4288
						126		20.252	1.4387
						146		17.207	1.4599
						206		14.718	1.4769
						226		12.897	1.4916
						256		10.207	1.5101
						326		8.605	1.5252
						356		7.025	1.5377
						426		5.558	1.5478
						456		4.733	1.5561
						526		4.376	1.5634
						556		4.232	1.5703
						626		3.756	1.5767
						656		3.660	1.5827
						726		3.871	1.5887
						756		3.519	1.5946
						826		3.192	1.6000
						856		2.876	1.6049
						926		2.536	1.6092
						956		2.151	1.6130
						1026		1.961	1.6163
						1056		1.743	1.6193
						1126		1.528	1.6219
						1156		1.388	1.6242
						1226		1.263	1.6263
						1256		1.073	1.6282
						1326		0.934	1.6298
						1400		0.794	1.6314
						1500		0.665	1.6337
						1600		0.529	1.6356
						1700		0.427	1.6371
						1800		0.354	1.6384
						1900		0.285	1.6394
						2000		0.241	1.6402
						2100		0.209	1.6409
						2200		0.176	1.6415
						2300		0.154	1.6420
						2400		0.129	1.6425

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.003210.



EVENT OF NOVEMBER 17 - 18, 1971  
RIESEL (WACO), TEXAS WATERSHED Y

## BIRSEL (WACO), TEXAS WATERSHED Y-2

LOCATION: Falls Co., Texas; 18 mi. SE Waco; Brazos River Basin.

AREA: 132.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														BIRSEL (WACO), TEXAS				WATERSHED Y-2			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual								
1971 P	0.01	1.59	0.30	3.34	2.19	1.38	10.91	2.89	2.13	4.23	4.98	6.95	40.51								
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.820	0.194	0.0	0.335	1.876	3.851	7.076								
STA AV P	2.11	2.69	2.56	3.96	4.29	3.33	1.80	2.08	2.67	2.69	2.98	2.61	33.77								
Q	0.428	0.580	0.718	0.893	1.069	0.550	0.144	0.050	0.088	0.117	0.374	0.535	5.544								
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																					
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days							
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1971	11-17	1.910	11-17	1.149	11-17	1.510	12- 9	1.963	12- 9	2.367	12- 9	2.992	12- 8	3.200	12- 2	3.749					
MAXIMUMS FOR PERIOD OF RECORD																					
5- 1	4.070	5- 1	3.110	5- 1	5.470	5- 1	7.080	5- 1	7.280	5- 1	7.460	4-30	9.640	4-29	10.600						
1944		1944		1944		1944		1944		1944		1944		1944							

NOTES: Watershed conditions: 20% cotton; 16% fall planted small grain, largely oats; 26% row grain sorghum; 35% pasture; 1% gravel and paved roads. Cropland terraced, contour cultivation, conservation treatment since 1942. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (revised). Precipitation and runoff records began Jan. 1, 1939. Precipitation data from Thiessen weighted method using rain gages 69, 69B, 70, 75A, and 84A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												BIRSEL (WACO), TEXAS WATERSHED Y-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.04E	0.06E	0.0	0.0	0.0	0.0	0.36	0.02E	0.0	0.0	0.0	0.98
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0
4	0.0	0.15	0.0	0.0 E	0.0	0.0	0.0	0.88	0.0	0.21	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.20	0.0	0.03E	0.0	0.67	
6	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.01E	0.0	0.49	
7	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.60	
9	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.09E	0.0	3.07	
10	0.0	0.0	0.0	0.0	1.04	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.78	0.02E	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.17	
15	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0
17	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	4.28	0.03E	
18	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.28	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.01E	1.09	0.0	0.0	0.0
20	0.0	0.0	0.0	0.84	0.60	0.0	0.0	0.0	0.0	1.69	0.0	0.0	0.0
21	0.0	0.15	0.0	0.0	0.0	0.44	3.98	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.08E	0.0	0.09E	0.0	0.0	0.78	0.0	0.0	0.46	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.02E	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.13E	0.0	1.92	0.0	1.20	0.0	0.0	0.0	0.0
25	0.0	1.06	0.08E	0.0	0.0	0.0	1.52	0.04E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.04E	0.40	1.37	0.0	0.0	0.11	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0 E	0.03E	
29	0.0	0.0	0.0	0.21	0.0	0.0	1.13	0.0	0.0	0.0	0.0	0.01E	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.19	0.0	0.0	0.0	0.40	
31	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.40	
TOTAL	0.01	1.59	0.30	3.34	2.19	1.38	10.91	2.89	2.13	4.23	4.98	6.95	
STA AV	2.11	2.69	2.56	3.96	4.29	3.33	1.80	2.08	2.67	2.69	2.98	2.61	

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69, 69B, 70, 75A, and 84A. Records began Jan. 1, 1939. STA AV based on 33 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 REAN DAILY DISCHARGE (cfs)													BISSEL (WACO), TEXAS				WATERSHED T-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.589	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.749	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.148	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.142	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.228	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.068	0.068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.120	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.060	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.584	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.999	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.112	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.086	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.387	0.008
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.934	0.004
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.005
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.856	0.003
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.003
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.061	0.004
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.004
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.225	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.006
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.006
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.358	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.006
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.440	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.004
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.799	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.222	0.004
31	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0
REAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1468	0.0348	0.0	0.0599	0.3468	0.6889							
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.194	0.0	0.335	1.876	0.01							
STA AV	0.428	0.580	0.718	0.893	1.069	0.550	0.144	0.050	0.088	0.117	0.374	0.535								

NOTES: To convert rean daily discharge in CFS to IN/DAY, multiply by 0.160316. Records began Jan. 1, 1939. STA AV based on 33 yr period.

1971 SELECTED RUNOFF EVENT												BISSEL (WACO), TEXAS				WATERSHED T-2			
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)				
EVENT OF NOVEMBER 17 - 18, 1971																			
11-17 RG 000069												RG 000069							
	0.0	0.0	11-17	0.0	0.0	0.0	11-17	2143	0.0	0.0									
				0.7501	0.05	0.05		2144	0.0	0.0									
				0.6000	0.07	0.12		2145	0.003	0.0									
				1.5005	0.12	0.24		2146	0.009	0.0									
				0.2998	0.13	0.37		2147	0.023	0.0									
WATERSHED CONDITIONS:																			
35% pasture, berardopgrass and native grass, good cover, moderately grazed; 38% tilled, bare; 26% fall planted small grain; 2 inches high; 1% gravel roads. Cropland terraced, cultivated on contour.																			
			1922	0.6003	0.15	0.15		2148	0.043	0.0									
			1924	1.1995	0.19	0.34		2149	0.100	0.0									
			1926	1.2005	0.23	0.57		2150	0.166	0.0									
			1928	1.1995	0.27	0.84		2151	0.259	0.0									
			1929	0.0	0.27	1.11		2152	0.418	0.0									
			1930	1.7987	0.30	1.41		2153	0.684	0.0001									
			1936	0.2001	0.32	1.73		2154	0.964	0.0002									
			1938	2.6993	0.41	2.14		2155	1.535	0.0003									
			1940	5.7015	0.60	2.74		2156	3.169	0.0006									
			1942	7.1986	0.84	3.58		2157	12.766	0.0018									
			1944	2.7005	0.93	4.51		2158	17.645	0.0036									
			1946	0.5995	0.95	5.46		2159	18.389	0.0057									
			1950	0.3001	0.97	6.43		2201	19.655	0.0107									
			1952	0.6003	0.99	7.03		2203	20.559	0.0154									
			2000	0.1500	1.01	8.04		2205	21.148	0.0209									
			2004	0.2998	1.03	9.07		2207	21.943	0.0260									
			2010	0.1001	1.04	10.11		2209	23.497	0.0320									
			2100	0.0120	1.05	11.16		2210	24.671	0.0348									
			2118	0.0333	1.06	12.22		2211	27.009	0.0378									
			2120	1.2000	1.10	13.42		2212	32.149	0.0421									
			2122	1.8004	1.16	15.22		2213	40.337	0.0464									
			2124	2.3995	1.24	17.62		2214	45.906	0.0515									
			2126	2.7005	1.33	20.32		2215	51.007	0.0586									
			2128	2.0998	1.40	22.42		2216	55.361	0.0648									
			2130	2.3995	1.48	24.90		2217	63.368	0.0718									

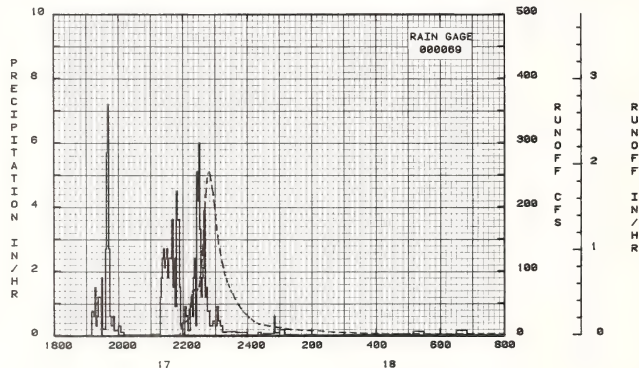
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.

1971 SELECTED RUNOFF EVENT					EISEL (WACO), TEXAS WATERSHED T-2				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)									
11-17	2132	2.7005	1.57			11-17	2218	67.369	0.0795
	2134	1.7995	1.63			2219	69.301	0.0895	
	2136	2.4006	1.71			2220	71.460	0.0978	
	2138	2.3995	1.79			2221	71.150	0.1062	
	2140	2.4006	1.87			2223	70.531	0.1249	
	2142	3.5991	1.99			2224	69.505	0.1331	
	2144	1.5005	2.04			2226	70.918	0.1405	
	2146	2.3995	2.12			2228	72.392	0.1683	
	2148	0.9002	2.15			2230	76.168	0.1879	
	2150	4.4989	2.30			2232	84.590	0.2068	
	2152	3.6007	2.42			2233	90.159	0.2171	
	2154	3.5995	2.54			2234	98.175	0.2309	
	2156	1.5005	2.59			2235	106.322	0.2429	
	2200	0.2998	2.61			2236	117.306	0.2560	
	2204	0.0	2.61			2237	129.716	0.2705	
	2206	0.9002	2.64			2238	142.316	0.2905	
	2208	0.6000	2.66			2239	156.865	0.3081	
	2210	0.6003	2.68			2240	176.537	0.3277	
	2214	0.1499	2.69			2241	193.007	0.3494	
	2216	0.8998	2.72			2242	207.093	0.3788	
	2218	1.2005	2.76			2243	217.468	0.4037	
	2220	0.5995	2.78			2244	229.144	0.4299	
	2222	1.8008	2.84			2245	239.585	0.4643	
	2224	2.1991	2.92			2246	245.606	0.4928	
	2226	0.3004	2.93			2247	251.517	0.5220	
	2228	5.0989	3.10			2248	253.168	0.5516	
	2230	4.1991	3.24			2249	254.160	0.5888	
	2232	6.0014	3.44			2250	253.002	0.6186	
	2234	3.2993	3.55			2251	250.528	0.6482	
	2236	1.2005	3.59			2253	241.045	0.7131	
	2238	1.7995	3.65			2255	229.622	0.7684	
	2240	2.1003	3.72			2257	218.093	0.8275	
	2242	3.8993	3.85			2259	203.728	0.8770	
	2244	1.2001	3.89			2301	187.062	0.9286	
	2246	1.4998	3.94			2303	171.359	0.9707	
	2250	0.7501	3.99			2305	155.345	1.0138	
	2256	0.3000	4.02			2307	142.049	1.0487	
	2300	0.4499	4.05			2309	132.046	1.0849	
	2304	0.3001	4.07			2311	124.595	1.1150	
	2306	0.9002	4.10			2313	114.830	1.1466	
	2310	0.4500	4.13			2315	105.723	1.1757	
	2314	0.3001	4.15			2317	99.107	1.1997	
	2320	0.0999	4.16			2319	92.879	1.2251	
	2330	0.1200	4.18			2321	87.804	1.2463	
	2340	0.1199	4.20			2323	82.726	1.2688	
	2400	0.0900	4.23			2325	79.691	1.2879	
	20	0.0	4.23			2327	74.481	1.3083	
	26	0.0999	4.24			2329	70.120	1.3253	
	30	0.0	4.24			2331	66.763	1.3438	
	50	0.0600	4.26			2333	64.260	1.3588	
	52	0.5997	4.28			2338	55.832	1.3976	
	100	0.0751	4.29			2343	48.925	1.4299	
	110	0.1800	4.32			2348	41.937	1.4579	
	200	0.0120	4.33			2353	36.157	1.4831	
	300	0.0	4.33			2358	32.302	1.5042	
	400	0.0200	4.35			2400	30.323	1.5125	
	430	0.0200	4.36			3	27.516	1.5227	
	500	0.0400	4.38			8	24.601	1.5395	
	510	0.0	4.38			13	21.412	1.5537	
	520	0.1200	4.40			18	18.955	1.5661	
	530	0.1199	4.42			23	17.387	1.5778	
	600	0.0200	4.43			33	15.613	1.5961	
	630	0.0200	4.44			43	14.102	1.6168	
	650	0.1500	4.49			53	12.994	1.6339	
						103	11.824	1.6492	
						113	9.864	1.6629	
						123	8.814	1.6747	
						143	7.726	1.6953	
						203	7.189	1.7139	
						223	5.897	1.7304	
						243	4.707	1.7436	
						303	3.816	1.7542	
						323	3.169	1.7630	
						343	2.668	1.7703	
						403	2.240	1.7764	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.

1971 SELECTED RUSOFF EVENT			RISSEL (WACO), TEXAS WATERSHED T-2					
ANTECEDENT CONDITIONS			RAINFALL			RUSOFF		
Date Mo-Day	Painfall (inches)	Rusoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)								
							11-18	
							423	1.908 1.7816
							443	1.701 1.7861
							503	1.526 1.7901
							533	1.413 1.7956
							603	1.354 1.8008
							633	1.430 1.8060
							703	1.508 1.8115
							733	1.544 1.8172
							803	1.465 1.8229
							833	1.346 1.8282
							903	1.179 1.8329
							933	1.012 1.8370
							1003	0.960 1.8405
							1033	0.734 1.8435
							1103	0.615 1.8460
							1130	0.509 1.8479
							1200	0.468 1.8487
							1300	0.356 1.8528
							1400	0.253 1.8551
							1500	0.175 1.8567
							1600	0.133 1.8579
							1700	0.102 1.8588
							1800	0.073 1.8595
							1900	0.052 1.8600
							2000	0.038 1.8603

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.



EVENT OF NOVEMBER 17 - 18, 1971  
RISSEL (WACO), TEXAS WATERSHED T-2

## RIESEL (WACO), TEXAS WATERSHED Y-6

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 16.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)										RIESEL (WACO), TEXAS WATERSHED Y-6						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971 P	0.01	1.54	0.30	3.30	2.22	1.48	10.76	3.01	2.13	4.14	5.13	6.91	40.94			
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.403	0.147	0.0	0.655	1.421	3.027	5.652			
STA AV P	1.96	2.73	2.24	3.94	3.83	3.52	1.80	2.12	2.69	2.90	2.95	2.44	33.11			
Q	0.279	0.350	0.394	0.631	0.740	0.544	0.121	0.048	0.094	0.221	0.366	0.377	4.165			
ANNUAL MAXIMUM DISCHARGE (in/hr) and MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		Maximum Volume for Selected Time Interval														
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days								
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date			
1971	11-17	1.367	11-17	0.807	11-17	1.057	11-17	1.341	12-9	1.719	12-9	2.308	12-8	2.551	12-2	2.970
MAXIMUMS FOR PERIOD OF RECORD																
6-10	3.790	3-29	1.900	3-29	2.340	3-29	2.950	3-29	3.130	3-29	3.670	11-22	4.870	4-19	8.490	
1941		1965		1965		1965		1965		1965		1940		1957		

NOTES: Watershed conditions: 93% row grain sorghum; 5% pasture; 2% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 698 and 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

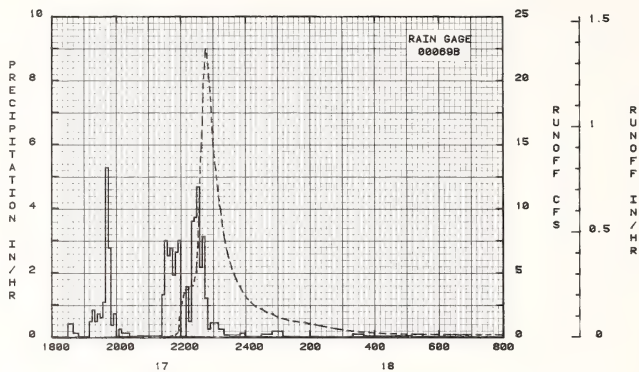
1971 DAILY PRECIPITATION (inches)										RIESEL (WACO), TEXAS WATERSHED Y-6			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.04E	0.06E	0.0	0.0	0.0	0.0	0.36	0.01E	0.0	0.0	0.0	0.97
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0
4	0.0	0.14	0.0	0.0E	0.0	0.0	0.0	1.00	0.0	0.21	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.18	0.0	0.03E	0.0	0.0	0.66
6	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.01E	0.0	0.0	0.49
7	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.60
9	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	3.03
10	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.80	0.02E	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.17
15	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0
17	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.40	0.03E
18	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.27	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.01E	1.09	0.0	0.0	0.0
20	0.0	0.0	0.0	0.84	0.61	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0
21	0.0	0.14	0.0	0.0	0.0	0.50	3.82	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.05E	0.0	0.04E	0.0	0.0	0.77	0.0	0.46	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.01E	0.0	0.01E	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.13E	0.0	1.91	0.0	1.22	0.0	0.0	0.0	0.0
25	0.0	1.03	0.09E	0.0	0.0	0.0	1.50	0.04E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.04E	0.86	1.31	0.0	0.0	0.11	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.04E	0.45	0.0	0.0	0.0	0.0E	0.0	0.04E
29	0.0	0.0	0.0	0.21	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.02E
30	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.20	0.0	0.0	0.0	0.0	0.40
31	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.41
TOTAL	0.01	1.54	0.30	3.30	2.22	1.48	10.76	3.01	2.13	4.14	5.13	6.91	
STA AV	1.96	2.73	2.24	3.94	3.83	3.52	1.80	2.12	2.69	2.90	2.95	2.44	

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 698 and 75A. Records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT						RISSEL (WACO), TEXAS			WATERSHED T-6		
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)											
11-17	2230	3.7195	3.49	11-17	2236	13.267	0.1786				
	2235	4.6803	3.88		2237	14.049	0.1876				
	2240	2.1602	4.06		2238	14.750	0.2047				
	2245	3.1196	4.32		2239	15.727	0.2192				
	2250	1.2001	4.42		2240	16.798	0.2387				
	2255	0.2399	4.44		2241	18.616	0.2515				
	2310	0.4800	4.55		2242	19.750	0.2783				
	2320	0.2400	4.59		2244	21.054	0.3131				
	2350	0.0600	4.62		2245	22.126	0.3388				
	2400	0.1200	4.64		2246	22.463	0.3600				
11-18	30	0.0	4.64		2248	22.089	0.4024				
	50	0.0900	4.67		2250	21.274	0.4488				
	110	0.1800	4.73		2252	20.217	0.4882				
	320	0.0	4.73		2254	19.464	0.5306				
	340	0.0900	4.76		2256	17.851	0.5661				
	440	0.0300	4.79		2258	16.190	0.6025				
	510	0.0400	4.81		2300	14.815	0.6357				
	530	0.0900	4.84		2302	13.985	0.6631				
	610	0.0	4.84		2305	12.958	0.7047				
	655	0.0667	4.89		2308	11.723	0.7428				
					2311	10.590	0.7746				
					2314	9.887	0.8062				
					2316	9.066	0.8265				
					2318	8.560	0.8433				
					2320	7.935	0.8609				
					2323	7.279	0.8844				
					2326	6.644	0.9043				
					2329	6.123	0.9240				
					2332	5.799	0.9424				
					2335	5.260	0.9595				
					2340	4.762	0.9885				
					2345	4.282	1.0081				
					2350	3.860	1.0284				
					2355	3.474	1.0467				
					2400	3.175	1.0641				
				11-18	5	2.904	1.0793				
					10	2.694	1.0933				
					20	2.324	1.1189				
					30	2.163	1.1418				
					40	1.898	1.1621				
					50	1.778	1.1809				
					100	1.532	1.1978				
					110	1.408	1.2125				
					120	1.300	1.2263				
					130	1.209	1.2391				
					140	1.145	1.2508				
					150	1.108	1.2623				
					200	1.009	1.2731				
					216	0.886	1.2888				
					231	0.768	1.3010				
					246	0.633	1.3117				
					301	0.543	1.3206				
					321	0.427	1.3304				
					341	0.358	1.3383				
					401	0.308	1.3451				
					421	0.289	1.3507				
					441	0.241	1.3556				
					501	0.198	1.3601				
					601	0.188	1.3718				
					701	0.157	1.3823				
					801	0.157	1.3919				
					901	0.122	1.4004				
					1001	0.093	1.4069				
					1101	0.058	1.4115				
					1200	0.029	1.4141				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.060843.



EVENT OF NOVEMBER 17 - 18, 1971  
RIESEL (WACO), TEXAS WATERSHED Y-6

## RIESEL (WACO), TEXAS WATERSHED Y-7

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 40.00 acres

MONTHLY PRECIPITATION AND RUNOFF (Inches)												
RIESEL (WACO), TEXAS WATERSHED Y-7												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Annual												
1971	0.0	0.0	0.0	0.27	3.39	1.44	10.45	3.15	2.35	4.06	4.63	7.35
STA AV	0.328	0.481	0.568	0.888	0.683	0.644	0.131	0.114	0.146	0.196	0.474	0.484
1941	1.99	2.77	2.27	4.03	3.84	3.49	1.76	2.19	2.64	2.91	2.98	2.47
1947	0.328	0.481	0.568	0.888	0.683	0.644	0.131	0.114	0.146	0.196	0.474	0.484

NOTES: Watershed conditions: 100% pasture, Bernadagrass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges 89 and W-2A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

DAILY PRECIPITATION (Inches)												
RIESEL (WACO), TEXAS WATERSHED Y-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.04E	0.03E	0.0	0.0	0.0	0.0	0.39	0.05E	0.0	0.0	1.07
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.29	0.0	0.22	0.0	0.0
5	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.10E	0.0	0.03E	0.0	0.71
6	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.01E	0.0	0.54
7	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.24	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.53
9	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.07E	0.0	3.40
10	0.0	0.0	0.0	0.0	1.04	0.0	0.0	0.0	0.0	0.0	0.0	0.01
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.16
15	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.0	0.06E	0.0	0.0
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.0	3.88	0.03E
18	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.29	0.0
19	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.01E	0.92	0.0	0.0
20	0.0	0.0	0.0	0.80	0.50	0.0	0.0	0.0	0.0	1.73	0.0	0.0
21	0.0	0.19	0.0	0.0	0.0	0.58	3.87	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.06E	0.0	0.11E	0.0	0.0	0.82	0.0	0.44	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.01E	0.0	0.0
24	0.0	0.0	0.0	0.0	0.13E	0.0	1.93	0.0	1.23	0.0	0.0	0.0
25	0.0	1.16	0.10E	0.0	0.0	0.0	1.89	0.02E	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0
27	0.0	0.0	0.0	0.0	0.03E	0.29	1.34	0.0	0.12	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.08E	0.48	0.0	0.0	0.02E	0.04E	0.0
29	0.0	0.0	0.24	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.01E	0.0
30	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.24	0.0	0.0	0.40	0.0
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.41
TOTAL	0.0	1.70	0.27	3.39	2.26	1.44	10.45	3.15	2.35	4.06	4.63	7.35
STA AV	1.99	2.77	2.27	4.03	3.84	3.49	1.76	2.19	2.64	2.91	2.98	2.47

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges 89 and W-2A. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)					RISSEL (WACO), TEXAS				WATERSHED T-7			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.093
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.499	0.0	0.0	0.0	0.0 T
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.347
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.467
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.033
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.158
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.405
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.464	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.717	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.717	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.342	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.108	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.752	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.161	0.0	0.0	0.0	0.0	0.0 T
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.064	0.0	0.021	0.106	0.2107
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.820	0.303	0.0	0.427	1.893	3.886
STA AV	0.328	0.481	0.568	0.848	0.883	0.644	0.131	0.114	0.146	0.196	0.474	0.884

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.595041. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period.

1971 SELECTED RUNOFF EVENTS					RISSEL (WACO), TEXAS				WATERSHED T-7			
ANTECEDENT CONDITIONS			RAINFALL		Date		RUNOFF		Date		Rate	
Date	Rainfall	Runoff	Time	Intensity	Acc.	Runoff	Time	Rate	Acc.	Runoff	Time	Rate
Mo-Day	(inches)	(inches)	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF NOVEMBER 17 - 18, 1971												
11-17	RG 000089	0.0	11-17	RG 000089	0.0	11-17	2114	0.0	0.0			
					0.000		2117	0.0	0.0			
					0.9002		2119	0.001	0.0			
					1.1995		2121	0.003	0.0			
					0.1599		2123	0.005	0.0			
WATERSHED CONDITIONS:					0.6000		2125	0.008	0.0			
100% pasture, bermudagrass,					1.2001		2129	0.016	0.0			
fair cover, moderately					1.2000		2132	0.021	0.0			
grazed.					0.5999		2134	0.038	0.0			
					0.2000		2135	0.065	0.0			
					3.3008		2136	0.107	0.0			
					5.9986		2138	0.143	0.0001			
					3.6007		2140	0.196	0.0002			
					3.6007		2142	0.262	0.0004			
					0.8998		2144	0.322	0.0006			
					0.3001		2145	0.869	0.0009			
					0.6003		2146	1.354	0.0013			
					0.1200		2147	1.975	0.0019			
					0.5995		2148	2.746	0.0028			
					0.0		2149	3.267	0.0043			
					0.0094		2150	3.999	0.0057			
					0.0		2151	4.698	0.0074			
					0.1499		2152	5.327	0.0093			
					2.4005		2153	5.937	0.0120			
					1.8000		2154	6.692	0.0144			
					2.1003		2155	7.833	0.0172			
					2.6995		2156	9.282	0.0205			
					3.0005		2157	11.312	0.0255			
					2.6993		2158	14.017	0.0304			
					3.0009		2159	16.625	0.0363			

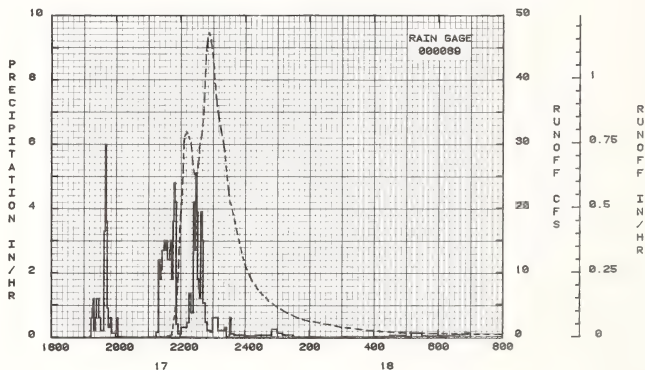
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024753.

1971 SELECTED RUNOFF EVENT										RIESEL (WACO), TEXAS			WATERSHED Y-7		
PRECEDENT CONDITIONS				RAINFALL				RUNOFF				Date No-Day	Time of Day	Rate (cfs)	Acc. (inches)
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.					
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)					
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)															
11-17	2140	2.4001	1.68	11-17	2200	18.546	0.0448								
	2142	2.6993	1.77	2201	19.893	0.0522									
	2144	3.0009	1.87	2202	20.452	0.0601									
	2146	1.7995	1.93	2203	22.276	0.0684									
	2148	3.6007	2.05	2204	24.794	0.0798									
	2150	4.7991	2.21	2205	27.008	0.0898									
	2152	4.2010	2.35	2206	29.829	0.1008									
	2153	1.7987	2.38	2207	30.876	0.1126									
	2156	0.4002	2.40	2208	31.257	0.1276									
	2202	0.0599	2.41	2209	31.554	0.1398									
	2206	0.3001	2.43	2211	31.852	0.1644									
	2210	0.2998	2.45	2213	31.639	0.1921									
	2212	0.3002	2.46	2215	31.172	0.2195									
	2216	0.4500	2.49	2217	30.792	0.2435									
	2220	1.3500	2.58	2219	30.121	0.2700									
	2224	0.7501	2.63	2221	28.877	0.2929									
	2226	4.2010	2.77	2223	26.807	0.3172									
	2228	2.6993	2.86	2225	25.302	0.3374									
	2230	5.0989	3.03	2227	24.678	0.3592									
	2232	3.9011	3.16	2228	24.716	0.3688									
	2234	1.7995	3.22	2229	24.950	0.3784									
	2236	1.5005	3.27	2231	25.577	0.4004									
	2238	1.1995	3.31	2233	26.887	0.4207									
	2240	3.9011	3.44	2234	27.896	0.4340									
	2241	2.9980	3.49	2235	29.372	0.4451									
	2242	3.0007	3.54	2236	30.121	0.4566									
	2246	1.0999	3.61	2238	30.708	0.4831									
	2250	0.4500	3.64	2240	32.108	0.5074									
	2256	0.2001	3.66	2242	33.835	0.5361									
	2300	0.1499	3.67	2243	35.064	0.5494									
	2302	0.6003	3.69	2244	37.207	0.5634									
	2306	0.6001	3.73	2245	39.766	0.5820									
	2310	0.5999	3.77	2246	41.678	0.5978									
	2316	0.2000	3.79	2247	43.815	0.6144									
	2322	0.1999	3.81	2248	45.116	0.6316									
	2326	0.3001	3.83	2250	46.528	0.6715									
	2332	0.0	3.83	2252	47.364	0.7079									
	2334	0.6000	3.85	2254	46.921	0.7480									
	2340	0.1000	3.86	2256	46.039	0.7850									
	2350	0.0601	3.87	2258	44.922	0.8246									
11-18	2400	0.0600	3.88	2300	43.385	0.8631									
	20	0.0300	3.89	2302	41.678	0.8961									
	30	0.0601	3.90	2304	39.166	0.9313									
	40	0.0600	3.91	2306	37.382	0.9609									
	50	0.0600	3.92	2308	35.906	0.9828									
	100	0.2001	3.96	2310	34.711	1.0202									
	110	0.1200	3.98	2312	33.574	1.0500									
	130	0.0600	4.00	2314	32.579	1.0756									
	300	0.0	4.00	2317	31.341	1.1158									
	430	0.0133	4.02	2320	30.037	1.1544									
	500	0.0400	4.04	2322	28.836	1.1772									
	510	0.0	4.04	2324	26.528	1.2013									
	520	0.1199	4.06	2326	25.028	1.2213									
	530	0.1200	4.08	2328	23.332	1.2424									
	600	0.0200	4.09	2330	21.977	1.2621									
	630	0.0400	4.11	2332	20.944	1.2787									
	640	0.0601	4.12	2334	20.507	1.2968									
	650	0.0600	4.13	2336	19.821	1.3124									
	700	0.1200	4.15	2338	19.074	1.3294									
				2340	18.302	1.3439									
				2342	17.610	1.3596									
				2344	16.827	1.3729									
				2346	15.958	1.3872									
				2348	15.268	1.3993									
				2350	14.622	1.4123									
				2352	13.891	1.4233									
				2354	13.081	1.4351									
				2356	12.441	1.4450									
				2358	11.960	1.4556									
				2400	11.282	1.4657									
11-18				4	10.420	1.4836									
				9	9.473	1.5038									
				14	8.612	1.5222									
				19	8.038	1.5399									
				24	7.379	1.5556									

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.

1971 SELECTED RUNOFF EVENT				RISSEL (WACO), TEXAS				WATERSHED T-7			
PRECIPITATION CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)											
							11-18	29	6.910	1.5701	
								34	6.476	1.5844	
								39	6.123	1.5972	
								44	5.572	1.6091	
								59	4.711	1.6410	
								119	3.699	1.6760	
								139	2.925	1.7033	
								159	2.474	1.7255	
								219	2.167	1.7448	
								239	1.836	1.7613	
								259	1.518	1.7751	
								329	1.200	1.7919	
								359	0.905	1.8049	
								429	0.729	1.8150	
								459	0.601	1.8232	
								559	0.493	1.8368	
								659	0.386	1.8477	
								759	0.367	1.8568	
								859	0.314	1.8650	
								959	0.253	1.8720	
								1059	0.193	1.8775	
								1159	0.156	1.8818	
								1259	0.102	1.8850	
								1359	0.070	1.8871	
								1459	0.046	1.8885	
								1559	0.033	1.8895	
								1659	0.025	1.8902	
								1759	0.017	1.8907	
								2059	0.006	1.8916	
								2400	0.003	1.8919	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.



EVENT OF NOVEMBER 17 - 18, 1971  
RISSEL (WACO), TEXAS WATERSHED T-7

## RIESEL (WACO), TEXAS WATERSHED Y-8

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 20.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												RIESEL (WACO), TEXAS WATERSHED Y-8											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	0.01	1.61	0.27	3.35	2.13	1.43	10.61	3.16	2.18	4.25	4.67	7.12	40.79										
Q	0.0	0.0	0.0	0.0	0.0	0.0	1.368	0.381	0.0	0.235	1.476	3.604	7.064										
STA AV P	1.88	2.74	2.33	4.02	3.74	3.64	1.85	2.16	2.79	3.02	3.01	2.48	33.65										
Q	0.309	0.400	0.484	0.752	0.793	0.593	0.170	0.073	0.127	0.128	0.417	0.430	4.676										

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												RIESEL (WACO), TEXAS WATERSHED Y-8											
Maximum Discharge	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days																
Date	Date	Date	Date	Date	Date	Date	Date																
1971	11-17	2.098	12-9	1.090	12-9	1.038	12-9	2.051	12-8	2.516	12-8	3.151	12-8	3.285	12-2	3.567							

MAXIMUMS FOR PERIOD OF RECORD												RIESEL (WACO), TEXAS WATERSHED Y-8											
6-10	3.290	4-19	2.410	4-19	2.800	4-23	3.320	4-23	3.370	3-29	3.590	11-22	5.640	4-19	9.100								
1941		1957		1957		1957		1957		1965		1960		1957									

NOTES: Watershed conditions: 95% cotton; 3% pasture; 2% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. Precipitation data obtained from rain gage 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-8											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.03E	0.04E	0.0	0.0	0.0	0.0	0.38	0.04E	0.0	0.0	1.01											
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0											
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.13	0.0	0.21	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.13	0.0	0.02E	0.0	0.66											
6	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.01E	0.0	0.54											
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.24	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.51											
9	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.08E	0.0	0.0	3.29											
10	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.01											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.85	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.17											
15	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0											
17	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.93											
18	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.30	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.01E	0.95	0.0	0.0											
20	0.0	0.0	0.0	0.82	0.53	0.0	0.0	0.0	0.0	1.87	0.0	0.0											
21	0.0	0.14	0.0	0.0	0.0	0.51	3.57	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.06E	0.0	0.10E	0.0	0.0	0.78	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.02E	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.12E	0.0	1.94	0.0	1.22	0.0	0.0	0.0											
25	0.0	1.10	0.08E	0.0	0.0	0.0	1.57	0.04E	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.04E	0.40	1.36	0.0	0.0	0.11	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.03E	0.50	0.0	0.0	0.0	0.0	0.03E											
29	0.0	0.0	0.0	0.23	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.01E											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.21	0.0	0.0	0.0	0.41											
31	0.0	0.0	0.0	0.0	0.03E	0.0	0.09E	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.01	1.61	0.27	3.35	2.13	1.43	10.61	3.16	2.18	4.25	4.67	7.12											
STA AV	1.88	2.74	2.33	4.02	3.74	3.64	1.85	2.16	2.79	3.02	3.01	2.48											

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 75A. Records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate the non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS WATERSHED T-8			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.293	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.069		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.163		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.007		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.753		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.109		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028	0.0	0.0	0.0	0.0	0.0 T		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.118	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.205	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.330	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.197	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.124	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.354	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.163	0.0	0.0	0.0	0.0	0.0	0.013		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010		
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0386	0.0107	0.0	0.0066	0.0430	0.1016			
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	1.368	0.381	0.0	0.235	1.476	3.684			
STA AV	0.309	0.400	0.488	0.752	0.793	0.593	0.170	0.073	0.127	0.128	0.417	0.430			

NOTES: To convert mean daily discharge in CFS to IN/DA, multiply by 1.48310. Records begin Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period.

1971 SELECTED RUNOFF EVENT												RIESEL (WACO), TEXAS WATERSHED T-8			
PRECEDENT CONDITIONS						RAINFALL						RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)
EVENT OF NOVEMBER 17 - 18, 1971															
RG 00075A															
11-17	0.0	0.0	11-17				1914	0.0	0.0			2117	0.0	0.0	
							1920	0.8000	0.08			2118	0.0	0.0	
							1925	0.4799	0.12			2120	0.001	0.0	
							1930	1.0800	0.21			2125	0.003	0.0	
							1938	0.3000	0.25			2130	0.004	0.0	
WATERSHED CONDITIONS:															
95% tilled, bare; 3% pasture, Berardusgrass, good cover, moderately grazed; 2% gravel roads. Cropland terraced, cultivated on contour.															
							1940	3.6007	0.37			2133	0.012	0.0	
							1942	5.3991	0.55			2136	0.008	0.0	
							1944	3.6007	0.67			2139	0.014	0.0	
							1946	1.2000	0.71			2140	0.033	0.0	
							1950	0.4500	0.74			2141	0.050	0.0	
							2000	0.1800	0.77			2143	0.070	0.0001	
							2010	0.1800	0.80			2145	0.089	0.0002	
							2120	0.0257	0.83			2146	0.120	0.0003	
							2122	2.7005	0.92			2147	0.184	0.0004	
							2124	1.7995	0.98			2148	0.236	0.0006	
							2126	2.1007	1.05			2149	0.334	0.0009	
							2128	2.9991	1.15			2150	0.601	0.0012	
							2130	2.9995	1.25			2151	0.799	0.0017	
							2132	2.7005	1.34			2152	0.950	0.0024	
							2134	2.3995	1.42			2153	1.314	0.0035	
							2136	3.3008	1.53			2154	1.589	0.0046	
							2138	2.0998	1.60			2155	1.990	0.0059	
							2140	3.0005	1.70			2156	2.423	0.0075	
							2145	2.4197	1.92			2157	3.102	0.0101	
							2150	3.2402	2.19			2158	3.398	0.0125	
							2154	3.4500	2.42			2159	4.079	0.0153	
							2204	0.1200	2.44			2200	4.762	0.0194	
							2210	0.5001	2.49			2201	5.483	0.0232	
							2215	0.1599	2.52			2202	5.937	0.0275	
							2220	1.2000	2.62			2203	6.193	0.0320	
							2224	0.7501	2.67			2204	6.381	0.0379	
							2226	4.5014	2.82			2205	6.381	0.0427	
							2228	3.2589	2.93			2206	6.310	0.0474	
							2230	5.0893	3.10			2207	6.165	0.0520	
							2232	3.3008	3.21			2208	5.914	0.0576	

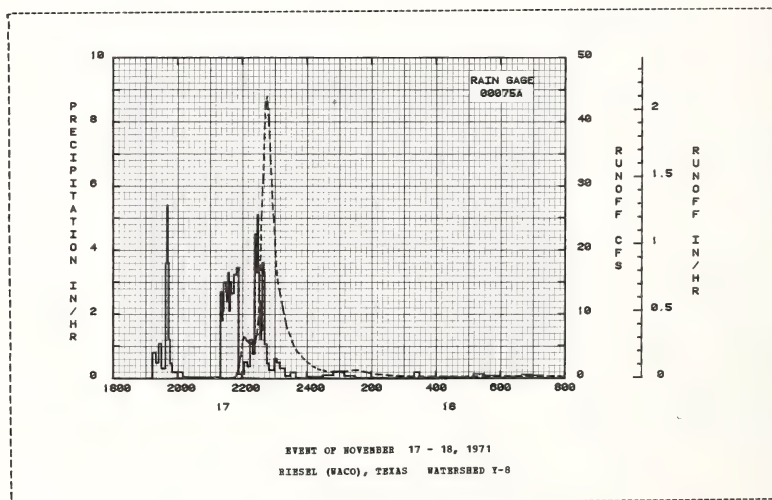
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.047680.

1971 SELECTED RUNOFF EVENT					EISEL (WACO), TEXAS			WATERSHED 1-2		
PRECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date No-Day	Rainfall (inches)	Runoff (inches)	Date No-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date No-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)										
11-17	2234	2.3991	3.29	11-17	2209	5.759	0.0620			
	2236	1.2005	3.33	2210	5.799	0.0663				
	2238	1.4998	3.38	2211	5.731	0.0706				
	2240	3.6007	3.50	2212	5.680	0.0759				
	2242	3.2593	3.61	2213	5.550	0.0801				
	2246	1.0499	3.68	2214	5.505	0.0842				
	2250	0.4502	3.71	2215	5.438	0.0893				
	2255	0.2399	3.73	2216	5.371	0.0933				
	2300	0.2400	3.75	2217	5.371	0.0973				
	2305	0.6001	3.90	2218	5.460	0.1013				
11-18	2310	0.4799	3.64	2219	5.460	0.1064				
	2320	0.3000	3.89	2220	5.550	0.1105				
	2330	0.0600	3.90	2221	5.483	0.1146				
	2340	0.1800	3.93	2222	5.371	0.1186				
	2400	0.0	3.93	2223	5.393	0.1236				
	30	0.0400	3.95	2224	5.505	0.1277				
	50	0.0900	3.98	2225	5.754	0.1319				
	110	0.2100	4.05	2226	6.123	0.1363				
	130	0.0600	4.07	2227	6.548	0.1422				
	320	0.0	4.07	2228	6.637	0.1472				
	330	0.1800	4.10	2229	7.655	0.1526				
	420	0.0	4.10	2230	8.402	0.1601				
	440	0.0300	4.11	2231	9.583	0.1668				
	510	0.0	4.11	2232	12.140	0.1749				
	530	0.1200	4.15	2233	15.366	0.1851				
	550	0.0600	4.17	2234	16.929	0.2001				
	620	0.0	4.17	2235	20.907	0.2142				
	640	0.0300	4.18	2236	25.341	0.2314				
	700	0.0900	4.21	2237	27.774	0.2512				
	720	0.0600	4.23	2238	29.746	0.2780				
	2239	31.852	0.3009							
	2240	34.316	0.3255							
	2241	37.478	0.3522							
	2242	39.612	0.3802							
	2243	42.102	0.4187							
	2244	43.194	0.4505							
	2245	43.576	0.4909							
	2246	44.007	0.5235							
	2247	43.146	0.5560							
	2248	41.914	0.5877							
	2249	40.462	0.6261							
	2250	38.350	0.6558							
	2251	37.433	0.6844							
	2252	35.462	0.7116							
	2253	33.443	0.7437							
	2254	31.766	0.7680							
	2255	29.912	0.7910							
	2256	28.059	0.8126							
	2257	26.289	0.8379							
	2258	25.302	0.8571							
	2259	24.290	0.8756							
	2300	23.180	0.8977							
	2301	21.384	0.9143							
	2302	19.714	0.9296							
	2303	18.198	0.9437							
	2304	16.625	0.9599							
	2305	16.124	0.9721							
	2306	15.431	0.9839							
	2309	13.891	1.0194							
	2312	12.714	1.0516							
	2315	11.253	1.0806							
	2318	10.026	1.1044							
	2321	8.825	1.1272							
	2324	7.731	1.1472							
	2327	7.106	1.1652							
	2330	6.524	1.1817							
	2333	5.799	1.1955							
	2336	5.063	1.2086							
	2341	4.261	1.2246							
	2346	3.680	1.2435							
11-18	2351	3.379	1.2577							
	2356	2.887	1.2700							
	2400	2.507	1.2790							
	6	2.179	1.2899							
	11	1.838	1.2978							

NOTES: To convert runoff in cfs to in/hr, multiply by 0.047680.

1971 SELECTED RUNOFF EVENT					BISSEL (WACO), TEXAS WATERSHED I-8				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)									
							11-18	16	1.618
								21	1.808
								26	1.274
								31	1.183
								36	1.058
								46	0.950
								56	0.880
								106	0.903
								116	1.083
								126	1.183
								136	1.183
								146	0.938
								200	0.725
								210	0.582
								230	0.395
								250	0.310
								310	0.222
								400	0.209
								430	0.150
								500	0.181
								530	0.209
								580	0.256
								550	0.284
								600	0.266
								630	0.201
								680	0.201
								650	0.219
								700	0.262
								710	0.253
								730	0.214
								800	0.156
								830	0.127
								900	0.094
								930	0.065
								1002	0.055
								1102	0.025
								1202	0.013

NOTES: To convert runoff in CFS to I8/HR, multiply by 0.047680.



## RIESEL (WACO), TEXAS WATERSHED T-10

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 18.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												RIESEL (WACO), TEXAS WATERSHED T-10											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971	P 0.01	1.55	0.32	3.34	2.24	1.40	11.00	2.77	2.09	4.17	5.23	6.81	40.94										
	Q 0.0	0.0	0.0	0.0	0.0	0.0	1.309	0.309	0.000	0.393	2.059	3.985	8.055										
STA AV	P 2.03	2.64	2.28	3.92	3.85	3.43	1.77	2.10	2.69	2.80	2.90	2.47	32.88										
	Q 0.400	0.413	0.546	0.866	0.711	0.612	0.178	0.089	0.162	0.207	0.449	0.470	5.122										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Discharge												Maximum Volume for Selected Time Interval											
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1971	11-17	2.607	11-17	1.300	11-17	1.599	12- 8	1.879	12- 8	2.322	12- 8	2.925	12- 8	3.083	12- 2	3.827							
MAXIMUMS FOR PERIOD OF RECORD																							
	4-19	3.730	4-19	2.900	4-19	3.480	3-29	4.130	3-29	4.270	3-29	4.620	4-23	5.340	4-19	10.570							
	1957		1957		1957		1965		1965		1965		1965		1957								

NOTES: Watershed conditions: 93% fall planted small grain, largely oats; 4% pasture; 3% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1159, p. 42.11-5 (Revised). Precipitation and runoff records began July 1, 1936; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gauges 69 and 69E. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED T-10											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.04E	0.07E	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.96											
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0											
4	0.0	0.15	0.0	0.0	0.0 E	0.0	0.0	0.0	0.81	0.0	0.21	0.0											
5	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.21	0.0	0.04E	0.0	0.68											
6	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.01E	0.0	0.47											
7	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.25	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.65											
9	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.10E	0.0	2.90											
10	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.04											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.75	0.03E	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.17											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	2.06	0.0	0.0	0.0	0.0	0.10E	0.0	0.0											
17	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	4.50	0.03E											
18	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.25	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.01E	1.17	0.0	0.0										
20	0.0	0.0	0.0	0.0	0.86	0.65	0.0	0.0	0.0	1.56	0.0	0.0											
21	0.0	0.15	0.0	0.0	0.0	0.0	0.44	4.15	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.03E	0.0	0.02E	0.0	0.0	0.0	0.77	0.0	0.48	0.0										
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.01E	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	1.91	0.0	1.19	0.0	0.0	0.0										
25	0.0	1.02	0.09E	0.0	0.0	0.0	0.0	1.48	0.04E	0.0	0.0	0.0	0.0										
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0										
27	0.0	0.0	0.0	0.0	0.0	0.04E	0.45	1.32	0.0	0.0	0.11	0.0	0.0										
28	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.46	0.0	0.0	0.0	0.0 E	0.04E										
29	0.0	0.0	0.0	0.20	0.0	0.0	0.0	1.16	0.0	0.0	0.0	0.0	0.02E										
30	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.18	0.0	0.0	0.0	0.39	0.0										
31	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.06E	0.0	0.0	0.41											
TOTAL	0.01	1.55	0.32	3.34	2.24	1.40	11.00	2.77	2.09	4.17	5.23	6.81											
STA AV	2.03	2.64	2.28	3.92	3.85	3.43	1.77	2.10	2.69	2.80	2.90	2.47											

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gauges 69 and 69E. Records began July 1, 1936; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 BEAN DAILY DISCHARGE (cfs)													BIRSEL (WACO), TEXAS				WATERSHED T-10			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0								
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.129	0.0	0.0	T	0.0								
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.0								
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0								
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.022	0.0	0.0	0.0	0.0								
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0								
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.0	0.0	0.0	0.0								
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0								
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.266E								
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.231								
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005								
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.305	T								
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.002	0.0								
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0								
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0								
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0	T	0.0								
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.261	0.0	0.0	0.0	0.0								
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0								
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.203	0.0	0.0	0.0	0.0								
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.092	0.0	0.0	0.0	0.0								
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.262	0.0	0.0	0.0	0.0								
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.173	0.0	0.0	0.0	0.0								
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0								
BEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0330	0.0078	0.0	0.0099	0.0536								
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.309	0.309	0.000	0.393	2.059								
STA AV	0.400	0.413	0.546	0.866	0.711	0.612	0.178	0.089	0.182	0.207	0.449	0.470								

NOTES: To convert bean daily discharge in CFS to IW/DAY, multiply by 1.279559. Record begins July 1, 1961; station not in operation July 1963 to May 1, 1964; part-year amounts not included in averages. STA AV based on 29 yr period.

1971 SELECTED RUNOFF EVENT												BIRSEL (WACO), TEXAS				WATERSHED T-10			
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)				
EVENT OF NOVEMBER 17 - 18, 1971																			
RG 000069																			
11-17	0.0	0.0	11-17	1910	0.0	0.0	11-17	2117	0.0	0.0									
				1914	0.7501	0.05		2119	0.0	0.0									
				1916	0.6000	0.07		2122	0.001	0.0									
				1918	1.5005	0.12		2127	0.003	0.0									
				1920	0.2998	0.13		2130	0.006	0.0									
WATERSHED CONDITIONS:																			
93% tilled, bare; 5% pasture, Bermudagrass, good cover, moderately grazed, 3% gravel roads. Cropland terraced, contour cultivation.																			
				1922	0.6063	0.15		2132	0.012	0.0									
				1924	1.1995	0.19		2133	0.031	0.0									
				1926	1.2005	0.23		2134	0.046	0.0									
				1928	1.1995	0.27		2135	0.071	0.0									
				1929	0.0	0.27		2137	0.121	0.0002									
				1930	1.7987	0.30		2139	0.174	0.0005									
				1936	0.2001	0.32		2141	0.225	0.0008									
				1938	2.6993	0.41		2143	0.266	0.0013									
				1940	5.7015	0.60		2145	0.328	0.0019									
				1942	7.1986	0.84		2146	0.970	0.0024									
				1944	2.7005	0.93		2147	1.120	0.0033									
				1946	0.5995	0.95		2148	2.308	0.0047									
				1950	0.3001	0.97		2149	3.212	0.0076									
				1952	0.6003	0.99		2150	3.919	0.0106									
				2000	0.1500	1.01		2151	5.107	0.0144									
				2004	0.2998	1.03		2152	6.983	0.0194									
				2010	0.1001	1.04		2153	8.692	0.0276									
				2100	0.0120	1.05		2154	11.753	0.0361									
				2118	0.0333	1.06		2155	14.334	0.0470									
				2120	1.2000	1.10		2156	17.508	0.0603									
				2122	1.8004	1.16		2157	20.001	0.0798									
				2124	2.3995	1.24		2158	21.606	0.0971									
				2126	2.7005	1.33		2159	21.680	0.1151									
				2128	2.0998	1.40		2200	21.090	0.1374									
				2130	2.3995	1.48		2201	19.215	0.1542									

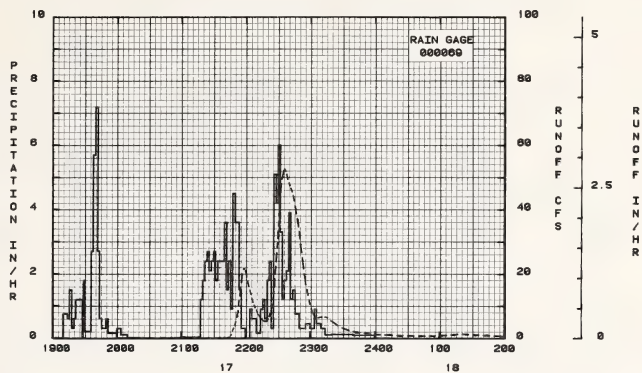
NOTES: To convert runoff in CFS to IW/HR, multiply by 0.053319.

1971 SELECTED RUNOFF EVENT				RINSEL (WACO), TEXAS				WATERSHED Y-10			
AFFECTED CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)											
11-17			2132		2.7005	1.57	11-17	2202	17.473	0.1695	
			2134		1.7995	1.63		2203	16.124	0.1835	
			2136		2.4006	1.71		2204	14.911	0.1997	
			2138		2.3995	1.79		2205	13.671	0.2116	
			2140		2.4006	1.87		2206	12.380	0.2225	
			2142		3.5991	1.99		2207	11.166	0.2323	
			2144		1.5005	2.04		2208	10.250	0.2435	
			2146		2.3995	2.12		2209	9.446	0.2517	
			2148		0.9002	2.15		2210	8.718	0.2593	
			2150		4.4989	2.30		2211	7.910	0.2662	
			2152		5.6007	2.42		2212	7.304	0.2741	
			2154		3.5995	2.54		2213	6.788	0.2800	
			2156		1.5005	2.59		2214	6.216	0.2884	
			2200		0.2998	2.61		2215	5.799	0.2917	
			2204		0.0	2.61		2216	5.438	0.2964	
			2206		0.9002	2.64		2217	5.327	0.3009	
			2208		0.6000	2.66		2218	5.238	0.3053	
			2210		0.6003	2.68		2219	5.349	0.3108	
			2214		0.1499	2.69		2220	5.527	0.3153	
			2216		0.8998	2.72		2221	6.007	0.3201	
			2218		1.2005	2.76		2222	6.837	0.3255	
			2220		0.5995	2.78		2223	7.782	0.3331	
			2222		1.8008	2.84		2224	8.878	0.3400	
			2224		2.3991	2.92		2225	10.533	0.3481	
			2226		0.3004	2.93		2226	13.051	0.3579	
			2228		5.0989	3.10		2227	16.929	0.3735	
			2230		4.1991	3.24		2228	22.350	0.3899	
			2232		6.0014	3.44		2229	26.607	0.4103	
			2234		3.2993	3.55		2230	31.980	0.4208	
			2236		1.2005	3.59		2231	38.753	0.4703	
			2238		1.7995	3.65		2232	43.767	0.5047	
			2240		2.1003	3.72		2233	48.006	0.5429	
			2242		3.8993	3.85		2234	50.406	0.5941	
			2244		1.2001	3.89		2235	52.131	0.6368	
			2246		1.4998	3.94		2236	52.643	0.6804	
			2250		0.7501	3.99		2237	51.927	0.7240	
			2256		0.3000	4.02		2238	50.911	0.7715	
			2300		0.4499	4.05		2239	49.401	0.8193	
			2304		0.3001	4.07		2240	48.254	0.8600	
			2306		0.9002	4.10		2241	47.364	0.8998	
			2310		0.4500	4.13		2242	46.577	0.9487	
			2314		0.3001	4.15		2243	45.504	0.9871	
			2320		0.0999	4.16		2244	44.440	1.0246	
			2330		0.1200	4.18		2245	42.671	1.0700	
			2340		0.1199	4.20		2246	40.741	1.1047	
			2400		0.0900	4.23		2247	38.707	1.1378	
								2248	36.846	1.1693	
								2249	34.623	1.2065	
								2250	32.279	1.2384	
								2251	29.207	1.2600	
								2252	26.567	1.2832	
								2253	24.059	1.3056	
								2254	21.532	1.3286	
								2255	19.109	1.3455	
								2256	16.659	1.3604	
								2257	14.815	1.3768	
								2258	13.298	1.3885	
								2259	11.990	1.3990	
								2300	10.420	1.4107	
								2301	9.255	1.4189	
								2302	8.350	1.4262	
								2303	7.605	1.4328	
								2304	6.983	1.4404	
								2305	6.596	1.4461	
								2306	6.381	1.4515	
								2308	6.405	1.4635	
								2311	6.596	1.4797	
								2314	6.596	1.4976	
								2316	6.405	1.5098	
								2321	5.107	1.5350	
								2326	3.919	1.5547	
								2331	3.012	1.5706	
								2336	2.473	1.5826	
								2341	2.052	1.5925	
								2346	1.778	1.6013	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.

1971 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED 1-10					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)								
							11-17	2351
								2356
								2400
							11-18	5
								12
								22
								32
								42
								52
								102
								112
								117
								122
								127
								132
								142
								152
								202
								212
								222
								232
								252
								312
								332
								352
								412
								432
								452
								512
								522
								532
								542
								547
								552
								612
								632
								642
								652
								702
								707
								712
								722
								732
								742
								752
								822
								852
								922
								952
								1052
								1130
								1200
								1300
								1400
								1500
								1600
								1800

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.



EVENT OF NOVEMBER 17 - 18, 1971  
RIESEL (WACO), TEXAS WATERSHED T-10

## RIESEL (WACO), TEXAS SW-11

LOCATION: Falls County, Texas; 19 miles southeast of Waco; Brazos River Basin.

AREA: 2.66 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												RIESEL (WACO), TEXAS SW-11	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	0.0	1.71	0.27	3.40	2.26	1.44	10.46	3.14	2.35	4.06	4.63	7.36	41.08
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.068	0.0	0.0	0.989	2.726	3.792
STA AV P	1.46	2.84	2.32	3.53	3.38	3.46	2.48	1.88	2.69	3.31	3.33	3.26	33.94
Q	0.176	0.407	0.413	0.130	0.183	0.694	0.086	0.008	0.281	0.334	1.034	0.784	4.530
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													
Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971 12-9	1.427	12-9	0.930	12-9	1.225	12-9	1.689	12-9	2.048	12-9	2.569	12-8	2.686
MAXIMUMS FOR PERIOD OF RECORD													
10-31	6.670	11-22	2.060	11-22	2.260	11-22	2.580	11-22	2.820	11-22	3.590	11-21	6.220
1940		1940		1940		1940		1940		1940		1940	

NOTES: Watershed conditions: 100% winter growing Harding grass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42-023-5. Precipitation and runoff records began March 1938; discontinued July 1943; reestablished July 1, 1969. Part-year amounts are included in station averages. Precipitation data from rain gage 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS SW-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.04E	0.03E	0.0	0.0	0.0	0.0	0.39	0.05E	0.0	0.0	1.07	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.29	0.0	0.22	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.10E	0.0	0.03E	0.0	0.71	
6	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.01E	0.0	0.54	
7	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.24	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.53	
9	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.07E	0.0	3.40	
10	0.0	0.0	0.0	0.0	1.04	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.16	
15	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	
17	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	3.88	0.03E	
18	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.29	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.01E	0.92	0.0	0.0	
20	0.0	0.0	0.0	0.80	0.50	0.0	0.0	0.0	0.0	1.73	0.0	0.0	
21	0.0	0.19	0.0	0.0	0.0	0.58	3.48	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.06E	0.0	0.11E	0.0	0.0	0.82	0.0	0.44	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.01E	0.0	0.0	
24	0.0	0.0	0.0	0.13E	0.0	0.0	1.93	0.0	1.23	0.0	0.0	0.0	
25	0.0	1.16	0.10E	0.0	0.0	0.0	1.49	0.02E	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.03E	0.29	1.35	0.0	0.0	0.12	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.04E	0.97	0.0	0.0	0.0	0.0	0.02E	0.04E	
29	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.19	0.0	0.0	0.0	0.40	
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.41	
TOTAL	0.0	1.71	0.27	3.40	2.26	1.44	10.46	3.14	2.35	4.06	4.63	7.36	
STA AV	1.46	2.84	2.32	3.53	3.38	3.46	2.48	1.88	2.69	3.31	3.33	3.26	

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42-002-1. Precipitation values are from rain gage 89. Records began March 1938; discontinued July 1943; reestablished July 1, 1969. Part-year amounts are included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS SW-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.285	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.086	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0002	0.0	0.0	0.0037	0.0098	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.068	0.0	0.0	0.989	2.726	
STA AV	0.176	0.407	0.413	0.130	0.183	0.698	0.086	0.008	0.281	0.338	1.034	0.784	

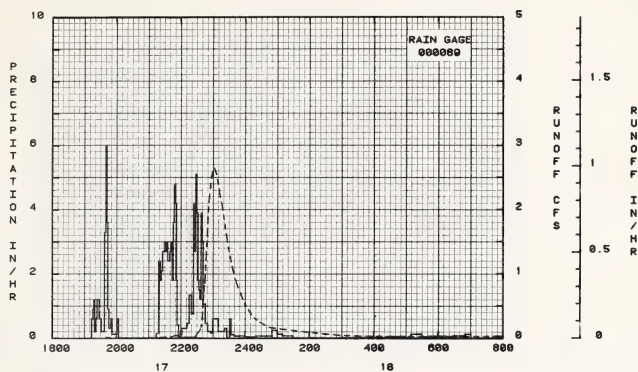
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 6.9477990. Records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts are included in averages. STA AV based on 9 yr record period.

1971 SELECTED RUNOFF EVENT												RIESEL (WACO), TEXAS SW-11	
ANTECEDENT CONDITIONS				RAINFALL								RUNOFF	
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF NOVEMBER 17 - 18, 1971													
RG 000089				RG 000089									
11-17	0.0	0.0	11-17		0.0	0.0	11-17	1939	0.0	0.0			
					0.6000	0.02		1940	0.004	0.0			
					0.9002	0.05		1941	0.008	0.0			
					1.1995	0.07		1942	0.011	0.002			
					0.1999	0.08		1946	0.007	0.0003			
WATERSHED CONDITIONS:													
100% winter growing Harding													
grass, 6 to 10 inches high,													
moderate cover.													
					0.6000	0.10		1948	0.003	0.0004			
					1.2001	0.18		1957	0.001	0.0005			
					1.2000	0.18		2117	0.0	0.0007			
					0.5999	0.22		2120	0.0	0.0007			
					0.2000	0.24		2122	0.003	0.0007			
					3.3008	0.35		2125	0.008	0.0008			
					5.9986	0.55		2128	0.012	0.0010			
					3.6007	0.61		2132	0.016	0.0013			
					3.6007	0.67		2142	0.023	0.0025			
					0.8998	0.70		2145	0.020	0.0029			
					0.3001	0.72		2147	0.026	0.0032			
					0.6003	0.74		2149	0.036	0.0036			
					0.1200	0.76		2151	0.042	0.0041			
					0.5995	0.78		2153	0.042	0.0047			
					0.0	0.78		2155	0.032	0.0051			
					0.0094	0.79		2157	0.022	0.0055			
					0.0	0.79		2200	0.015	0.0059			
					0.1499	0.80		2203	0.010	0.0061			
					2.4005	0.92		2207	0.008	0.0063			
					1.8000	0.98		2217	0.006	0.0067			
					2.1003	1.05		2220	0.011	0.0069			
					2.6995	1.23		2223	0.009	0.0071			
					3.0005	1.33		2225	0.014	0.0072			
					2.6993	1.42		2227	0.025	0.0075			
					3.0009	1.52		2228	0.033	0.0077			

NOTES: To convert runoff in CFS to IN/HR, multiply by .372833.

1971 SELECTED RUNOFF EVENT				BIESEL (WACO), TEXAS SW-11			
ANTECEDENT CONDITIONS			RAINFALL		RUNOFF		
Date	Rainfall	Runoff	Date	Intensity	Date	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	(in/hr)	Mo-Day	(cfs)	(inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)							
11-17	2140	2.4001	1.68	11-17	2229	0.083	0.0079
	2142	2.6993	1.77	2230	0.057	0.0083	
	2144	3.0009	1.87	2231	0.070	0.0087	
	2146	1.7995	1.93	2232	0.083	0.0091	
	2148	3.6007	2.05	2234	0.100	0.0103	
	2150	4.7991	2.21	2236	0.116	0.0116	
	2152	4.2010	2.35	2237	0.138	0.0123	
	2153	1.7987	2.38	2238	0.169	0.0134	
	2156	0.4002	2.40	2239	0.208	0.0145	
	2202	0.0999	2.41	2240	0.291	0.0160	
	2206	0.3001	2.43	2241	0.399	0.0180	
	2210	0.2998	2.45	2242	0.541	0.0214	
	2212	0.3002	2.46	2243	0.656	0.0249	
	2216	0.4500	2.49	2244	0.820	0.0292	
	2220	1.3500	2.58	2245	0.856	0.0353	
	2224	0.7501	2.63	2246	0.981	0.0407	
	2226	4.2010	2.77	2247	1.140	0.0469	
	2228	2.6993	2.86	2248	1.353	0.0542	
	2230	5.0989	3.03	2249	1.512	0.0646	
	2232	3.9011	3.16	2250	1.714	0.0740	
	2234	1.7995	3.22	2251	1.892	0.0845	
	2236	1.5005	3.27	2252	2.047	0.0960	
	2238	1.1995	3.31	2253	2.177	0.1114	
	2240	3.9011	3.44	2255	2.343	0.1277	
	2241	2.9980	3.49	2257	2.499	0.1694	
	2242	3.0007	3.54	2259	2.585	0.1990	
	2246	1.0499	3.61	2302	2.655	0.2486	
	2250	0.4500	3.64	2307	2.547	0.3281	
	2256	0.2001	3.66	2312	2.272	0.4053	
	2300	0.1499	3.67	2317	2.075	0.4718	
	2302	0.6003	3.69	2322	1.771	0.5306	
	2306	0.6001	3.73	2327	1.491	0.5829	
	2310	0.5999	3.77	2332	1.255	0.6249	
	2316	0.2000	3.79	2337	1.074	0.6605	
	2322	0.1999	3.81	2342	0.908	0.6923	
	2326	0.3001	3.83	2347	0.780	0.7181	
	2332	0.0	3.83	2352	0.694	0.7406	
	2334	0.6000	3.85	2356	0.596	0.7566	
	2340	0.1000	3.86	2400	0.523	0.7713	
	2350	0.0601	3.87	11-18	2	0.497	0.7772
11-18	2400	0.0600	3.88	7	0.434	0.7914	
	20	0.0300	3.89	12	0.363	0.8042	
	30	0.0601	3.90	17	0.314	0.8146	
	40	0.0600	3.91	22	0.279	0.8237	
	50	0.0600	3.92	27	0.246	0.8321	
	100	0.2401	3.96	37	0.204	0.8459	
	110	0.1200	3.98	47	0.164	0.8574	
	130	0.0600	4.00	57	0.149	0.8672	
	300	0.0	4.00	117	0.134	0.8847	
	430	0.0133	4.02	137	0.111	0.8999	
	500	0.0400	4.04	157	0.087	0.9123	
	510	0.0	4.04	227	0.060	0.9260	
	520	0.1199	4.06	257	0.043	0.9356	
	530	0.1200	4.08	327	0.032	0.9426	
	600	0.0200	4.09	357	0.025	0.9479	
	630	0.0400	4.11	457	0.020	0.9563	
	640	0.0601	4.12	557	0.019	0.9636	
	650	0.0600	4.13	657	0.019	0.9707	
	700	0.1200	4.15	757	0.016	0.9772	
				857	0.013	0.9826	
				957	0.006	0.9861	
				1057	0.003	0.9878	
				1157	0.001	0.9885	
				1500	0.0	0.9891	

NOTES: To convert runoff in CFS to IN/HR, multiply by .372833.



EVENT OF NOVEMBER 17 - 18, 1971  
 RIESEL (WACO), TEXAS SW-11

## RIESEL (WACO), TEXAS WATERSHED SW-12

LOCATION: McLennan Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 2.97 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												RIESEL (WACO), TEXAS WATERSHED SW-12											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	0.02	1.63	0.33	3.34	2.22	1.11	11.40	2.71	2.10	4.47	4.93	6.86	41.12										
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.552	0.064	0.0	0.012	2.220	4.168	7.016										
STA AV P	2.01	2.72	2.24	3.94	3.81	3.51	1.81	2.06	2.68	2.80	2.90	2.43	32.92										
Q	0.405	0.621	0.590	0.652	0.570	0.375	0.090	0.019	0.035	0.010	0.219	0.412	3.996										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge				1 Hour				2 Hours				6 Hours				12 Hours				1 Day			
Date	Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	11-17	3.345	11-17	1.587	11-17	2.046	12-8	2.269	12-8	3.284	12-8	3.474	12-2	4.156									
MAXIMUMS FOR PERIOD OF RECORD																							
	3-29	4.000	3-29	3.070	3-29	3.830	3-29	4.620	3-29	4.800	3-29	5.340	3-29	5.390	4-19	6.530							
	1965		1965		1965		1965		1965		1965		1965		1965								

NOTES: Watershed conditions: 100% native grass meadow mowed annually for hay. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.24-4. Precipitation and runoff records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. Precipitation data obtained from rain gage 70. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS					WATERSHED SW-12					
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec										
1	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
2	0.0	0.04E	0.07E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.96										
3	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.0										
4	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.21	0.0	0.0	0.0										
5	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.38	0.0	0.03E	0.0	0.68										
6	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.01E	0.0	0.44										
7	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.23	0.0	0.0	0.0	0.0										
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.63										
9	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.08E	0.0	3.07										
10	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
12	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.78	0.03E	0.0	0.0	0.0										
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E										
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.18										
15	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0										
16	0.0	0.0	0.0	0.0	2.10	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0										
17	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.15	0.03E										
18	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.31	0.0										
19	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.02E	1.16	0.0	0.0										
20	0.0	0.0	0.0	0.84	0.66	0.0	0.0	0.0	0.0	0.0	1.77	0.0	0.0										
21	0.0	0.14	0.0	0.0	0.0	0.0	0.31	4.53	0.0	0.0	0.0	0.0	0.0										
22	0.0	0.0	0.0	0.02E	0.0	0.0	0.16	0.0	0.0	0.77	0.0	0.47	0.0										
23	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.02E	0.0	0.0	0.0										
24	0.0	0.0	0.0	0.0	0.14	0.0	0.0	1.92	0.0	1.23	0.0	0.0	0.0										
25	0.0	1.05	0.09E	0.0	0.0	0.0	0.0	1.54	0.04E	0.0	0.0	0.0	0.0										
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0										
27	0.0	0.0	0.0	0.0	0.0	0.04E	0.24	1.46	0.0	0.0	0.13	0.0	0.0										
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.55	0.0	0.0	0.0	0.0										
29	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.02E										
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.17	0.0	0.0	0.0	0.39										
31	0.0				0.0	0.04E		0.0	0.10E			0.0	0.37										
TOTAL	0.02	1.63	0.33	3.34	2.22	1.11	11.40	2.71	2.10	2.68	4.47	4.93	6.86										
STA AV	2.01	2.72	2.24	3.94	3.81	3.51	1.81	2.06	2.68	2.80	2.90	2.43	32.92										

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 70. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event TOTALS ARE INCLUDED.

1971 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS WATERSHED SW-12											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0022	0.0003	0.0	0.0	0.0090	0.0164											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.552	0.064	0.0	0.012	2.220	1.168											
STA AV	0.405	0.621	0.590	0.652	0.570	0.375	0.090	0.019	0.035	0.010	0.219	0.412											

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.010425. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 29 yr period.

1971 SELECTED RUNOFF EVENT												RIESEL (WACO), TEXAS WATERSHED SW-12											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)		No-Day	of Day	(cfs)	(inches)								
EVENT OF NOVEMBER 17 - 18, 1971																							
RG 000070						RG 000070																	
11-17	0.0	0.0	11-17	1910	0.0	0.0	11-17	1939	0.0	0.0													
				1916	0.3999	0.04		1941	0.001	0.0													
				1918	1.2005	0.08		1943	0.004	0.0													
				1920	0.5995	0.10		1944	0.009	0.0													
				1923	0.2002	0.11		1945	0.013	0.0001													
WATERSHED CONDITIONS: 100% native grass meadow, 6 inches high.																							
				1924	1.8004	0.14		1946	0.020	0.0002													
				1926	0.9002	0.17		1947	0.026	0.0003													
				1930	1.1998	0.25		1948	0.026	0.0004													
				1931	1.2005	0.27		1950	0.021	0.0007													
				1934	0.1999	0.28		1952	0.015	0.0009													
				1936	0.2999	0.29		1954	0.010	0.0011													
				1938	0.8998	0.32		1956	0.008	0.0012													
				1940	3.9011	0.45		2001	0.004	0.0014													
				1942	10.7977	0.81		2006	0.003	0.0015													
				1944	3.0009	0.91		2016	0.002	0.0016													
				1946	0.2998	0.92		2123	0.001	0.0022													
				1949	0.1999	0.93		2126	0.003	0.0022													
				1950	1.2005	0.95		2128	0.005	0.0022													
				1952	0.6003	0.97		2129	0.007	0.0022													
				2000	0.1500	0.99		2130	0.011	0.0023													
				2004	0.4500	1.02		2131	0.017	0.0024													
				2010	0.1000	1.03		2132	0.023	0.0025													
				2116	0.0091	1.04		2133	0.032	0.0026													
				2118	0.9002	1.07		2134	0.039	0.0028													
				2120	2.3995	1.15		2137	0.042	0.0034													
				2122	2.1007	1.22		2141	0.049	0.0044													
				2124	2.0993	1.29		2142	0.054	0.0047													
				2126	3.0009	1.39		2143	0.062	0.0050													
				2130	2.5494	1.56		2144	0.083	0.0054													
				2132	1.8004	1.62		2145	0.097	0.0060													
				2134	2.6993	1.71		2146	0.115	0.0066													
				2136	2.1007	1.78		2147	0.141	0.0073													
				2138	2.0993	1.85		2148	0.165	0.0081													
				2140	3.3008	1.96		2149	0.203	0.0093													
				2142	2.9995	2.06		2150	0.273	0.0106													

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.3333918.

1971 SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS WATERSHED SW-12				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)									
11-17									
	2144	1.5005	2.11	11-17	2151	0.365	0.0123		
	2146	0.8998	2.14		2152	0.519	0.0147		
	2148	3.6007	2.26		2153	0.735	0.0189		
	2150	3.8993	2.39		2154	1.154	0.0239		
	2152	3.6007	2.51		2155	1.636	0.0314		
	2156	0.4500	2.54		2156	2.297	0.0419		
	2200	0.1501	2.55		2157	2.976	0.0595		
	2202	0.2999	2.56		2158	3.448	0.0767		
	2204	0.6000	2.58		2159	3.870	0.0963		
	2206	0.5998	2.60		2200	4.136	0.1230		
	2210	0.3001	2.62		2201	4.197	0.1453		
	2215	0.7199	2.68		2202	4.118	0.1675		
	2220	1.4402	2.80		2203	4.014	0.1892		
	2222	1.2001	2.84		2204	3.828	0.2154		
	2224	2.3995	2.92		2205	3.591	0.2352		
	2226	3.9011	3.05		2206	3.378	0.2538		
	2228	2.6993	3.14		2207	3.188	0.2713		
	2230	7.4984	3.39		2208	3.052	0.2921		
	2232	3.0009	3.49		2209	2.941	0.3081		
	2234	1.1995	3.53		2210	2.799	0.3234		
	2236	1.5005	3.58		2211	2.585	0.3378		
	2238	1.7995	3.64		2212	2.457	0.3546		
	2240	4.5009	3.79		2213	2.343	0.3674		
	2242	1.2000	3.83		2214	2.212	0.3796		
	2244	1.5005	3.88		2215	2.047	0.3938		
	2246	0.5995	3.90		2216	1.883	0.4043		
	2250	0.4500	3.93		2218	1.666	0.4233		
	2255	0.2401	3.95		2220	1.528	0.4425		
	2300	0.3599	3.98		2222	1.451	0.4584		
	2305	0.6001	4.03		2223	1.435	0.4680		
	2310	0.4799	4.07		2224	1.455	0.4757		
	2320	0.1800	4.10		2225	1.512	0.4836		
	2330	0.1200	4.12		2226	1.590	0.4919		
	2340	0.0601	4.13		2227	1.658	0.5027		
	2400	0.0600	4.15		2228	1.709	0.5117		
11-18									
	20	0.0	4.15		2229	1.976	0.5215		
	30	0.1200	4.17		2230	2.364	0.5360		
	40	0.0	4.17		2231	2.456	0.5499		
	50	0.1200	4.19		2232	3.440	0.5667		
	100	0.1199	4.21		2233	4.504	0.5879		
	110	0.2401	4.25		2234	5.921	0.6227		
	200	0.0	4.25		2235	7.159	0.6576		
					2236	8.180	0.6986		
					2237	8.878	0.7442		
					2238	9.386	0.8052		
					2239	9.781	0.8564		
					2240	9.722	0.9085		
					2241	9.531	0.9599		
					2242	9.415	1.0232		
					2243	9.545	1.0739		
					2244	9.692	1.1253		
					2245	9.458	1.1893		
					2246	9.128	1.2390		
					2247	8.584	1.2863		
					2248	8.048	1.3307		
					2249	7.608	1.3830		
					2250	6.953	1.4219		
					2251	6.540	1.4579		
					2252	6.097	1.4917		
					2253	5.706	1.5311		
					2254	5.289	1.5605		
					2255	4.873	1.5876		
					2256	4.504	1.6127		
					2257	4.145	1.6416		
					2258	3.845	1.6629		
					2259	3.511	1.6826		
					2300	3.233	1.7051		
					2301	2.999	1.7218		
					2302	2.839	1.7374		
					2303	2.683	1.7522		
					2304	2.505	1.7695		
					2305	2.343	1.7825		
					2306	2.202	1.7946		
					2307	2.080	1.8060		
					2309	1.948	1.8302		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.333918.

1971 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS				WATERSHED SW-12			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)										

## RIESEL (WACO), TEXAS WATERSHED SW-17

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 2.99 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS				WATERSHED SW-17			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual							
1971	P	0.0	1.55	0.24	3.26	2.35	1.40	10.09	3.58	2.28	3.99	4.56	6.89	40.19							
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.826	0.736	0.0	0.320	2.055	3.510	7.448							
STA AV	P	0.90	2.77	2.27	4.09	3.75	3.42	1.84	2.25	2.78	3.02	3.00	2.51	33.59							
	Q	0.388	0.641	0.695	0.961	0.789	0.721	0.205	0.096	0.170	0.175	0.525	0.597	5.963							
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																					
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days			
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1971		11-17	1.760	12-9	1.038	11-17	1.737	11-17	2.038	12-9	2.439	12-8	2.829	12-7	2.829	12-1	7.716				
MAXIMUMS FOR PERIOD OF RECORD																					
		10-31	7.060	4-19	2.540	4-19	2.960	4-23	3.310	3-29	3.520	3-29	4.250	11-22	5.370	4-19	9.420				
		1940		1957		1957		1957		1965		1965		1940		1957					

NOTES: Watershed conditions: 100% Berardgrass pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42-28-5. Precipitation and runoff record began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. Precipitation data obtained from rain gage W-2. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED SW-17	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.03E	0.03E	0.0	0.0	0.0	0.0	0.36	0.04E	0.0	0.0	1.01	0.0
3	0.0 E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0
4	0.0	0.14	0.0	0.0 E	0.0	0.0	0.0	1.52	0.0	0.21	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.08E	0.0	0.0	0.0	0.67	0.0
6	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.01E	0.0	0.45	0.0
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.57	0.0
9	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.05E	0.0	3.15	0.0
10	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.14	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.15	0.0
15	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	2.00	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0
17	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	3.67	0.03E	0.0
18	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.26	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.01E	1.05	0.0	0.0	0.0
20	0.0	0.0	0.0	0.81	0.43	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0
21	0.0	0.14	0.0	0.0	0.0	0.60	2.93	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.04E	0.0	0.01E	0.0	0.0	0.78	0.0	0.43	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.02E	0.0	0.0	0.0
24	0.0	0.0	0.0	0.15	0.0	0.0	1.94	0.0	1.18	0.0	0.0	0.0	0.0
25	0.0	1.09	0.07E	0.0	0.0	0.0	1.55	0.0 E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.03E	0.36	1.10	0.0	0.0	0.21	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.02E	0.66	0.0	0.0	0.0	0.0 E	0.04E	0.0
29	0.0	0.0	0.22	0.0	0.0	0.0	1.44	0.0	0.0	0.0	0.0	0.02E	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.46	0.0	0.0	0.0	0.33	0.0
31	0.0			0.03E			0.0	0.02E				0.39	
TOTAL	0.0	1.55	0.24	3.26	2.35	1.40	10.09	3.58	2.28	3.99	4.56	6.89	
STA AV	1.90	2.77	2.27	4.09	3.75	3.42	1.84	2.25	2.78	3.02	3.00	2.51	

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-2. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 27 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												BIRSEL (WACO), TEXAS WATERSHED SW-17	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.090	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.385	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.233	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0033	0.0030	0.0	0.0013	0.0086	0.0	
1 INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.826	0.736	0.0	0.330	2.055	3.510	
STA AV	0.388	0.641	0.695	0.961	0.789	0.721	0.205	0.096	0.170	0.175	0.525	0.597	

NOTE: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.960819. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 27 yr period.

1971 SELECTED RUNOFF EVENT												BIRSEL (WACO), TEXAS WATERSHED SW-17	
ANTICIPATED CONDITIONS						RAINFALL						RUNOFF	
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF NOVEMBER 17 - 18, 1971													
RG 0000W2													
11-17	0.0	0.0	11-17	1912	0.0	0.0	11-17	1936	0.0	0.0			
				1916	1.2000	0.08		1937	0.001	0.0			
				1920	0.1499	0.09		1938	0.007	0.0			
				1922	2.7005	0.18		1939	0.019	0.0001			
				1924	0.8998	0.21		1940	0.025	0.0002			
				1926	1.2005	0.25		1941	0.023	0.0003			
				1928	0.2998	0.26		1943	0.013	0.0005			
				1930	0.6000	0.28		1944	0.008	0.0006			
				1936	0.1000	0.29		1945	0.005	0.0006			
				1938	4.1991	0.43		1949	0.002	0.0007			
				1940	5.1012	0.60		1954	0.0	0.0007			
				1943	3.0000	0.75		2019	0.0	0.0007			
				1946	0.3998	0.77		2115	0.0	0.0007			
				1950	0.3001	0.79		2116	0.0	0.0007			
				2000	0.1800	0.82		2117	0.003	0.0007			
				2002	0.3004	0.83		2118	0.005	0.0007			
				2030	0.0214	0.84		2120	0.007	0.0008			
				2100	0.0200	0.85		2121	0.011	0.0008			
				2110	0.0	0.85		2122	0.017	0.0009			
				2115	0.2400	0.87		2124	0.028	0.0012			
				2118	1.8004	0.96		2125	0.033	0.0014			
				2120	2.3995	1.04		2126	0.051	0.0016			
				2122	2.7005	1.13		2127	0.059	0.0021			
				2126	2.5500	1.30		2128	0.148	0.0027			
				2128	2.9995	1.40		2129	0.200	0.0036			
				2130	2.3995	1.48		2130	0.274	0.0051			
				2133	4.0009	1.68		2131	0.410	0.0069			
				2136	1.7998	1.77		2132	0.524	0.0093			
				2140	2.5500	1.94		2133	0.576	0.0122			
				2142	3.2993	2.05		2134	0.655	0.0162			

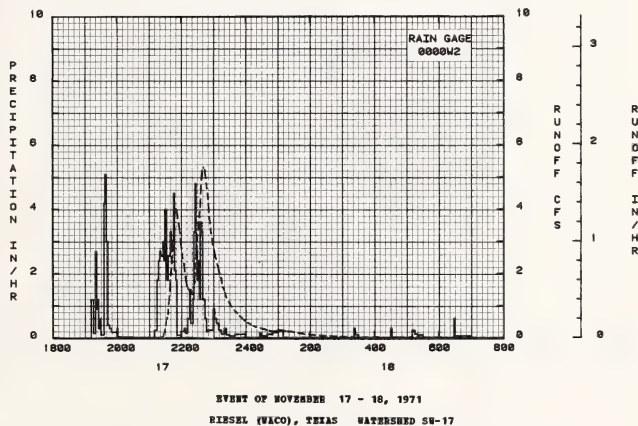
NOTE: To convert runoff in CFS to IN/HR, multiply by 0.331684.

1971 SELECTED RUNOFF EVENT				BIESSEL (WACO), TEXAS				WATERSHED SW-17			
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)											
11-17	2144	2.7010	2.14	11-17	2135	0.794	0.0198				
	2146	2.9991	2.24		2136	0.895	0.0240				
	2148	4.5014	2.39		2137	1.080	0.0291				
	2150	2.9533	2.46		2138	1.110	0.0368				
	2152	1.8004	2.52		2139	1.513	0.0441				
	2200	0.0751	2.53		2140	1.795	0.0527				
	2206	0.1999	2.55		2141	2.005	0.0625				
	2208	0.3002	2.56		2142	2.172	0.0760				
	2212	0.1499	2.57		2143	2.357	0.0877				
	2216	0.6001	2.61		2144	2.549	0.1004				
2218	2218	1.5000	2.66		2145	2.870	0.1180				
	2222	0.4500	2.69		2146	3.218	0.1338				
	2224	1.2000	2.73		2147	3.646	0.1516				
	2226	3.3008	2.84		2148	3.826	0.1710				
	2228	4.7991	3.00		2149	3.908	0.1961				
	2230	2.6993	3.09		2150	3.997	0.2166				
	2232	1.8004	3.15		2151	4.025	0.2374				
	2234	2.3995	3.23		2152	3.963	0.2581				
	2236	1.2001	3.27		2154	3.719	0.3029				
	2238	3.5995	3.39		2156	3.476	0.3402				
2240	2240	3.3008	3.50		2158	3.236	0.3793				
	2242	1.1995	3.54		2159	3.059	0.3956				
	2244	1.2005	3.58		2201	2.778	0.4296				
	2247	0.5999	3.61		2203	2.473	0.4568				
	2250	0.1999	3.62		2205	2.299	0.4846				
	2255	0.2401	3.64		2207	2.058	0.5072				
	2300	0.2358	3.66		2209	1.795	0.5297				
	2302	0.9002	3.69		2211	1.614	0.5474				
	2306	0.6001	3.73		2213	1.530	0.5657				
	2310	0.4500	3.76		2215	1.476	0.5832				
2315	2315	0.2400	3.78		2217	1.513	0.5987				
	2320	0.1199	3.79		2219	1.440	0.6159				
	2324	0.3001	3.81		2221	1.392	0.6306				
	2330	0.0999	3.82		2222	1.356	0.6377				
	2340	0.0601	3.83		2223	1.411	0.6467				
	2400	0.1200	3.87		2224	1.555	0.6544				
	26	0.0	3.87		2225	1.754	0.6630				
	30	0.1499	3.88		2226	2.020	0.6728				
	40	0.0601	3.89		2227	2.129	0.6869				
	50	0.1199	3.91		2228	2.587	0.6996				
100	100	0.1800	3.94		2229	2.870	0.7137				
	105	0.2401	3.96		2230	3.059	0.7329				
	110	0.2401	3.98		2231	3.206	0.7491				
	200	0.0	3.98		2232	3.431	0.7663				
	322	0.0	3.98		2233	3.613	0.7846				
	324	0.2998	3.99		2234	3.772	0.8085				
	330	0.1001	4.00		2235	3.928	0.8285				
	430	0.0100	4.01		2236	4.194	0.8495				
	432	0.2998	4.02		2237	4.624	0.8723				
	510	0.0158	4.03		2238	5.029	0.9036				
515	515	0.2399	4.05		2239	5.211	0.9301				
	520	0.1201	4.06		2241	5.307	0.9446				
	524	0.0	4.06		2242	5.291	1.0189				
	530	0.0999	4.07		2244	5.227	1.0734				
	628	0.0104	4.08		2246	4.967	1.1328				
	630	0.5997	4.10		2248	4.654	1.1827				
	650	0.0600	4.12		2250	4.308	1.2350				
	700	0.0600	4.13		2252	3.908	1.2716				
					2254	3.554	1.3211				
					2256	3.243	1.3563				
2259	2259	2.894	2.894		2259	2.894	1.4080				
	2302	2.648	1.4547		2302	2.648	1.4547				
	2305	2.452	1.4977		2305	2.452	1.4977				
	2308	2.248	1.5373		2308	2.248	1.5373				
	2311	2.024	1.5705		2311	2.024	1.5705				
	2314	1.850	1.6031		2314	1.850	1.6031				
	2316	1.688	1.6237		2316	1.688	1.6237				
	2318	1.576	1.6406		2318	1.576	1.6406				
	2320	1.476	1.6584		2320	1.476	1.6584				
	2322	1.392	1.6733		2322	1.392	1.6733				
2324	2324	1.264	1.6888		2324	1.264	1.6888				
	2329	1.111	1.7211		2329	1.111	1.7211				
	2334	0.972	1.7508		2334	0.972	1.7508				
	2339	0.860	1.7757		2339	0.860	1.7757				
	2344	0.770	1.7979		2344	0.770	1.7979				

NOTES: To convert runoff in CFS to LB/HR, multiply by 0.331684.

1971 SELECTED RUSOFF EVENT			RINSEL (WACO), TEXAS WATERSHED SW-17					
ANTECEDENT CONDITIONS			RAINFALL			RUSOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF NOVEMBER 17 - 18, 1971 (CONTINUED)								
				11-17	2349			0.682 1.8186
					2354			0.609 1.8362
					2357			0.562 1.8461
					2400			0.518 1.8552
				11-18	4			0.470 1.8661
					9			0.625 1.8783
					14			0.383 1.8893
					19			0.348 1.8997
					29			0.298 1.9172
					39			0.245 1.9323
					44			0.222 1.9387
					49			0.205 1.9448
					53			0.209 1.9494
					57			0.220 1.9541
					101			0.217 1.9589
					104			0.228 1.9626
					109			0.228 1.9688
					114			0.219 1.9749
					119			0.206 1.9810
					129			0.182 1.9916
					139			0.149 2.0008
					149			0.123 2.0088
					159			0.104 2.0186
					209			0.085 2.0199
					219			0.070 2.0242
					239			0.048 2.0307
					259			0.034 2.0352
					319			0.024 2.0384
					339			0.020 2.0408
					359			0.015 2.0427
					419			0.011 2.0441
					509			0.008 2.0467
					529			0.011 2.0477
					559			0.009 2.0494
					659			0.007 2.0521
					759			0.004 2.0539
					859			0.001 2.0547

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.331688.



## RIESEL (WACO), TEXAS WATERSHED SW-19

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 3.25 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED SW-19									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
	P	0.01	1.30	0.42	3.15	2.35	0.92	11.85	2.49	1.79	4.54	5.29	6.58	40.69									
1971	Q	0.0	0.0	0.0	0.0	0.0	0.0	1.672	0.050	0.0	0.067	2.399	3.024	7.212									
STA AV	P	0.01	1.30	0.42	3.15	2.35	0.92	11.85	1.68	4.05	4.28	2.81	3.73	36.54									
	Q	0.0	0.0	0.0	0.0	0.0	0.0	1.672	0.050	0.0	0.045	1.159	1.512	4.478									
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days									
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1971	11-17	2.938	11-17	1.727	11-17	2.269	11-17	2.376	11-17	2.396	11-17	2.399	12- 8	2.483	12- 2	3.015							
MAXIMUMS FOR PERIOD OF RECORD																							
	11-17	2.938	11-17	1.727	11-17	2.269	11-17	2.376	11-17	2.396	11-17	2.399	12- 8	2.483	12- 2	3.015							
1971	1971		1971		1971		1971		1971		1971		1971		1971								

NOTES: Watershed conditions: 100% rangeland grasses with moderate infestation of honey mesquite, moderately grazed. For map of watershed, see Hydrologic Data for Agricultural Watersheds in the United States, 1970, USDA Misc. Pub. 1380, p. 42.035-4. Precipitation and runoff records began September 1, 1970, part year records are included in the STA AV. Precipitation data obtained from rain gage 56-B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

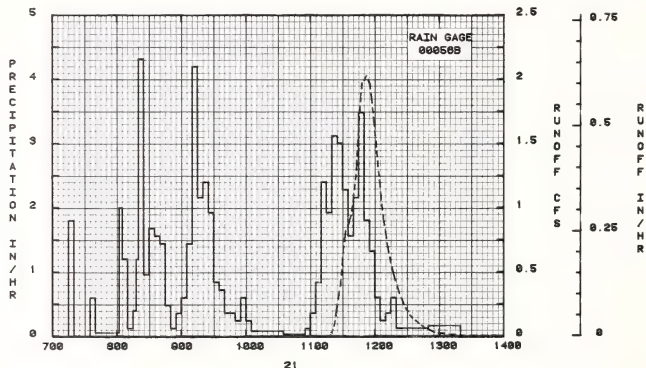
1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED SW-19							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
1	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
2	0.0	0.04E	0.12	0.0	0.0	0.0	0.0	0.0	0.34	0.0 E	0.0	0.0	1.01							
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0							
4	0.0	0.08E	0.0	0.0 E	0.0	0.0	0.0	0.58	0.0	0.17	0.0	0.0	0.0							
5	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.17	0.0	0.04E	0.0	0.73							
6	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.02E	0.0	0.45							
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0							
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.64							
9	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.09E	0.0	0.0	2.50							
10	0.0	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0	0.0	0.0	0.0	0.05							
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0							
12	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0							
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E							
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.20							
15	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0							
16	0.0	0.0	0.0	0.0	1.97	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0							
17	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	4.55	0.03E							
18	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.25	0.0							
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	1.65	0.0	0.0							
20	0.0	0.0	0.0	0.0	0.82	0.74	0.0	0.0	0.0	0.0	1.35	0.0	0.0							
21	0.0	0.17	0.0	0.0	0.0	0.0	0.32	5.11	0.0	0.0	0.0	0.0	0.0							
22	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	0.77	0.0	0.0	0.49	0.0							
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.02E	0.0	0.0							
24	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	2.12	0.0	0.98	0.0	0.0	0.0							
25	0.0	0.80	0.10E	0.0	0.0	0.0	0.0	1.62	0.16	0.0	0.0	0.0	0.0							
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0							
27	0.0	0.0	0.0	0.0	0.0	0.0	0.54	1.30	0.0	0.0	0.15	0.0	0.0							
28	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.25	0.0	0.0	0.0	0.0 E	0.04E							
29	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.02E							
30	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.15	0.0	0.0	0.0	0.0	0.45							
31	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.35							
TOTAL	0.01	1.30	0.42	3.15	2.35	0.92	11.85	2.49	1.79	4.54	5.29	6.58								
STA AV	0.01	1.30	0.42	3.15	2.35	0.92	11.85	1.68	4.05	4.28	2.81	3.73								

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 56B. Records began September 1, 1970. STA AV based on 2 yr (1970-71) record period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS WATERSHED SW-19					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 21, 1971 (CONTINUED)											
7-21	1110	0.8400	2.90	7-21	1205	1.157	0.2689				
	1115	2.4000	3.10		1206	1.060	0.2782				
	1120	1.9200	3.26		1207	0.975	0.2791				
	1125	3.1200	3.52		1208	0.906	0.2847				
	1130	3.0000	3.77		1209	0.863	0.2889				
	1135	2.2800	3.96		1210	0.806	0.2929				
	1140	1.5600	4.09		1211	0.760	0.2966				
	1145	2.1600	4.27		1212	0.705	0.3010				
	1150	3.4800	4.56		1213	0.649	0.3042				
	1155	1.8000	4.71		1215	0.571	0.3107				
	1200	1.3200	4.82		1217	0.500	0.3158				
	1205	0.6000	4.87		1219	0.431	0.3208				
	1210	0.2400	4.89		1221	0.390	0.3247				
	1215	0.3600	4.92		1223	0.333	0.3286				
	1220	0.6000	4.97		1225	0.287	0.3316				
	1250	0.1200	5.03		1227	0.246	0.3345				
	1320	0.1600	5.11		1229	0.218	0.3367				
					1231	0.187	0.3389				
					1233	0.159	0.3405				
					1235	0.139	0.3421				
					1238	0.119	0.3441				
					1241	0.098	0.3457				
					1244	0.084	0.3471				
					1247	0.061	0.3482				
					1250	0.048	0.3490				
					1255	0.032	0.3500				
					1300	0.022	0.3507				
					1305	0.015	0.3512				
					1310	0.010	0.3515				
					1315	0.007	0.3517				
					1320	0.004	0.3518				
					1330	0.002	0.3520				
					1340	0.001	0.3521				
					1400	0.0	0.3522				
					1600	0.0	0.3522				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.305149.



EVENT OF JULY 21, 1971  
RIESEL (WACO), TEXAS WATERSHED SW-19



1971 MEAN DAILY DISCHARGE (cfs)												RISSEL (WACO), TEXAS WATERSHED SW-20											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.030											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.015											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.330	0.0										
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.0										
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0										
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.090	0.0	0.0	0.0	0.0	0.0										
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0										
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.109	0.0	0.0	0.0	0.0	0.0										
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0										
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0										
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0										
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0										
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0104	0.0003	0.0	0.0005	0.0115	0.0145										
INCHES	0.0	0.0	0.0	0.0	0.011	0.005	0.0	2.400	0.076	0.0	0.112	2.551	3.327										
STA AV	0.0	0.0	0.0	0.0	0.011	0.005	0.0	2.400	0.076	0.002	0.037	2.232	3.302										

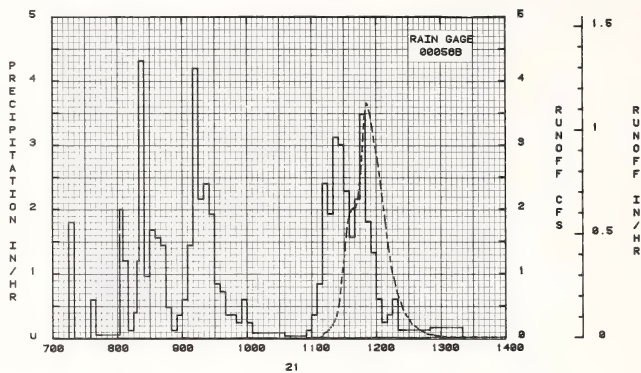
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.414845. Records began September 1, 1970.  
STA AV based on 2 yr (1970-71) record period.

1971 SELECTED RUNOFF EVENT												RISSEL (WACO), TEXAS WATERSHED SW-20											
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF															
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF JULY 21, 1971																							
7-21	RG 000568	0.0	7-21	RG 000568	0.0	0.0	7-21	1104	0.0	0.0													
					715	1.8000	0.15																
					720	1.8000	0.15																
					735	0.0	0.15																
					740	0.6000	0.20																
					802	0.0545	0.22																
WATERSHED CONDITIONS:				805	2.0000	0.32		1110	0.030	0.0002													
100% rangeland grasses, 4 to				810	1.2000	0.42		1111	0.058	0.0004													
6 inches tall, with moderate				815	0.1200	0.43		1112	0.076	0.0008													
infestation of honey mesquite.				818	0.4000	0.45		1113	0.089	0.0012													
				820	1.2000	0.45		1114	0.099	0.0017													
				825	4.3200	0.85		1115	0.118	0.0024													
				830	0.9600	0.93		1116	0.133	0.0030													
				835	1.6800	1.07		1117	0.157	0.0037													
				840	1.5600	1.20		1118	0.173	0.0045													
				845	1.4400	1.32		1119	0.198	0.0056													
				850	0.4800	1.36		1120	0.217	0.0066													
				855	0.1200	1.37		1121	0.248	0.0077													
				900	0.3600	1.40		1122	0.255	0.0080													
				905	0.6000	1.45		1123	0.340	0.0109													
				910	1.4400	1.57		1124	0.409	0.0127													
				915	4.2000	1.92		1125	0.493	0.0149													
				920	2.1600	2.10		1126	0.605	0.0176													
				925	2.4000	2.30		1127	0.765	0.0217													
				930	1.9200	2.46		1128	0.940	0.0258													
				935	0.8400	2.53		1129	1.094	0.0307													
				940	0.7200	2.59		1130	1.203	0.0376													
				945	0.3600	2.62		1131	1.408	0.0439													
				950	0.3600	2.65		1132	1.580	0.0511													
				955	0.2400	2.67		1133	1.706	0.0590													
				1000	0.6000	2.72		1134	1.829	0.0657													

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.308952.

1971 SELECTED RUNOFF EVENT						RIESEL (BACO), TEXAS WATERSHED SW-2								
ANTECEDENT CONDITIONS			Date Mo-Day	Time of Day	RAINFALL		Date Mo-Day	Time of Day	RUNOFF		Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
Date	Rainfall (inches)	Runoff (inches)			Intensity (in/hr)	Acc. (inches)			Rate (cfs)	Acc. (inches)				
EVENT OF JULY 21, 1971 (CONTINUED)														
7-21	1005	0.2400	2.74	7-21	1135	1.883	0.0787							
	1035	0.0800	2.78		1137	1.988	0.09774							
	1055	0.0300	2.79		1139	2.025	0.1192							
	1100	0.1200	2.80		1141	2.035	0.1388							
	1105	0.3600	2.83		1142	2.082	0.1512							
	1110	0.8400	2.90		1143	2.159	0.1614							
	1115	2.4000	3.10		1144	2.302	0.1722							
	1120	1.9200	3.26		1145	2.480	0.1866							
	1125	3.1200	3.52		1146	2.682	0.1991							
	1130	3.0000	3.77		1147	2.909	0.2126							
	1135	2.2800	3.96		1148	3.178	0.2273							
	1140	1.5600	4.09		1149	3.430	0.2472							
	1145	2.1600	4.27		1150	3.544	0.2640							
	1150	3.4800	4.56		1151	3.652	0.2814							
	1155	1.8000	4.71		1152	3.618	0.2989							
	1200	1.3200	4.82		1154	3.490	0.3375							
	1205	0.6000	4.87		1156	3.280	0.3702							
	1210	0.2400	4.89		1158	3.041	0.40405							
	1215	0.3600	4.92		1200	2.875	0.4366							
	1220	0.6000	4.97		1202	2.661	0.4633							
	1250	0.1200	5.03		1204	2.393	0.4907							
	1320	0.1600	5.11		1206	2.120	0.5125							
					1208	1.838	0.5340							
					1209	1.698	0.5425							
					1210	1.551	0.5503							
					1211	1.408	0.5574							
					1212	1.328	0.5657							
					1213	1.181	0.5718							
					1214	1.091	0.5773							
					1215	1.014	0.5837							
					1217	0.875	0.5928							
					1219	0.724	0.6015							
					1221	0.615	0.6080							
					1223	0.540	0.6143							
					1225	0.433	0.6190							
					1227	0.364	0.6233							
					1229	0.317	0.6266							
					1231	0.266	0.6298							
					1233	0.210	0.6321							
					1236	0.175	0.6351							
					1239	0.140	0.6376							
					1242	0.111	0.6396							
					1245	0.081	0.6411							
					1247	0.064	0.6418							
					1249	0.055	0.6424							
					1251	0.048	0.6429							
					1252	0.046	0.6431							
					1254	0.035	0.6435							
					1255	0.030	0.6437							
					1257	0.029	0.6440							
					1259	0.024	0.6443							
					1302	0.019	0.6446							
					1305	0.013	0.6449							
					1309	0.011	0.6451							
					1329	0.009	0.6461							
					1359	0.008	0.6474							
					1759	0.007	0.6567							

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.308952.



## RIESEL (WACO), TEXAS WATERSHED T-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED T-13													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P 0.0	0.01	1.71	0.31	3.34	2.18	0.0	0.386	0.121	0.0	0.363	0.0	41.10	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
STA AV	P 0.55	2.98	3.04	3.40	1.85	0.63	3.99	1.70	3.23	4.67	2.39	3.93	32.36	Q 0.001	0.325	1.214	0.405	0.013	0.0	0.129	0.040	0.0	0.265	0.0	2.559		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																								
Maximum Discharge												Maximum Volume for Selected Time Interval												
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
7-27	2.062	10-20	0.324	10-20	0.359	10-20	0.363	10-19	0.363	10-19	0.363	10-18	0.363	10-18	0.363	10-18	0.363	10-18	0.363	10-18	0.363	10-18	0.363	10-18

MAXIMUMS FOR PERIOD OF RECORD															
7-27	2.062	2-24	0.419	2-24	0.574	3-7	0.972	3-7	1.025	3-6	1.701	3-6	1.725	2-27	2.645
1971		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: 96% fall planted oats; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.037-5. Precipitation and runoff records began January 1, 1969. Precipitation data obtained from rain gage 70-A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED T-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.35	0.0E	0.0	0.0	1.01	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.01E	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.19	0.0	0.0E	0.0	0.0	0.0	0.59	0.0	0.18	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.36	0.0	0.03E	0.0	0.72	5	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.01E	0.0	0.50	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.22	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.59	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.10E	0.0	3.07	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	0.0	0.0	0.03	10	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.69	0.03E	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.19	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	2.13	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.33	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.03E	1.11	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.87	0.69	0.0	0.0	0.0	0.0	1.78	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.15	0.0	0.0	0.0	0.31	4.12	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.01E	0.0	0.24	0.0	0.0	0.78	0.0	0.45	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.01E	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.14	0.0	1.77	0.0	1.18	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	1.15	0.09E	0.0	0.0	0.0	1.59	0.04E	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.03E	0.24	1.57	0.0	0.0	0.12	0.0	0.0	27	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.63E	0.78	0.0	0.0	0.0	0.0	0.02E	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.22	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.01E	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.22	0.16	0.0	0.0	0.0	0.47	0.0	30	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.08E	0.0	0.0	0.40	0.0	31	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.01	1.71	0.31	3.34	2.18	1.18	11.25	2.65	2.08	4.42	4.87	7.10	TOTAL	0.01	1.71	0.31	3.34	2.18	1.18	11.25	2.65	2.08	4.42	4.87	7.10
STA AV	0.55	2.98	3.04	3.40	1.85	0.63	3.99	1.70	3.23	4.67	2.39	3.93	STA AV	0.55	2.98	3.04	3.40	1.85	0.63	3.99	1.70	3.23	4.67	2.39	3.93

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 70-A. Records began January 1, 1969. STA AV based on 3 yr (1969-71) record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)						RIESEL (WACO), TEXAS WATERSHED Y-13						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.027	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.087	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0059	0.0019	0.0	0.0056	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.386	0.121	0.0	0.363	0.0	0.0
STA AV	0.001	0.325	1.214	0.405	0.013	0.0	0.129	0.040	0.0	0.265	0.0	0.167

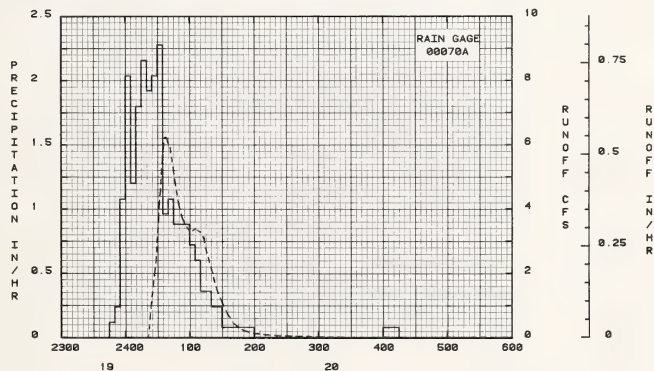
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.10631. Records began January 1, 1969.  
 STA AV based on 3 yr (1969-71) record period.

1971 SELECTED RUNOFF EVENT						RIESEL (WACO), TEXAS WATERSHED Y-13					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF OCTOBER 19 - 20, 1971											
RG 00070A			RG 00070A								
10-19	0.99		10-19	2345	0.0	10-20	21	0.0	0.0		
10-20		0.0		2350	0.1199		22	0.107	0.0001		
				2355	0.2401		23	0.620	0.0007		
				2400	1.0798		24	6.975	0.0018		
			10-20	5	2.0400		25	1.289	0.0034		
WATERSHED CONDITIONS:				10	1.2001	0.39	26	1.620	0.0054		
96% oats recently planted;				15	1.7999	0.54	27	1.935	0.0084		
stand not yet established;				20	2.1601	0.72	28	2.170	0.0112		
4% Bermuda grass waterway,				25	1.9200	0.88	29	2.519	0.0144		
good cover.				30	2.0800	1.05	30	3.129	0.0192		
				35	2.2798	1.24	31	3.721	0.0238		
				40	0.5600	1.32	32	4.278	0.0294		
				45	1.0801	1.41	33	4.639	0.0355		
				100	0.8800	1.63	34	5.256	0.0440		
				105	0.7200	1.69	35	5.687	0.0515		
				110	0.5999	1.74	36	6.052	0.0595		
				120	0.3601	1.80	37	6.228	0.0679		
				130	0.2400	1.84	38	6.228	0.0786		
				200	0.0800	1.88	39	6.206	0.0871		
				400	0.0	1.88	40	6.052	0.0955		
				415	0.0800	1.90	42	5.900	0.1139		
							45	5.236	0.1387		
							47	4.733	0.1524		
							50	4.138	0.1722		
							52	3.819	0.1831		
							55	3.560	0.1995		
							100	3.311	0.2254		
							103	3.326	0.2391		
							105	3.383	0.2495		
							107	3.340	0.2587		

NOTES: To convert runoff in CFS to IN/HR, multiply by .087764.

1971 SELECTED RUNOFF EVENT			IRISEL (WACO), TEXAS WATERSHED I-13								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF OCTOBER 19 - 20, 1971 (CONTINUED)											
							10-20	110	3.269	0.2734	
								113	3.101	0.2876	
								115	2.781	0.2967	
								120	2.159	0.3145	
								125	1.511	0.3277	
								130	1.111	0.3376	
								135	0.735	0.3442	
								140	0.470	0.3485	
								145	0.320	0.3515	
								150	0.224	0.3535	
								155	0.171	0.3549	
								200	0.126	0.3560	
								210	0.086	0.3575	
								220	0.064	0.3586	
								230	0.050	0.3594	
								240	0.039	0.3600	
								300	0.023	0.3609	
								320	0.014	0.3614	
								330	0.011	0.3616	
								400	0.007	0.3620	
								500	0.004	0.3625	
								600	0.002	0.3628	
								900	0.0	0.3631	
								1130	0.0	0.3631	

NOTES: To convert runoff in CFS to IN/HR, multiply by .067764.



EVENT OF OCTOBER 19 - 20, 1971  
IRISEL (WACO), TEXAS WATERSHED I-13

AREA: 5.60 acres

NOTES: Watershed conditions: 96% cotton; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42-038-5. Precipitation and runoff records began January 1, 1969. Precipitation data from Thiessen weighted method using rain gages 75-A and 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 75A and 89. Records began January 1, 1969. STA AV based on 3 yr (1969-71) record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED T-14			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.085
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.409E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.156	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.052	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0002	0.0	0.0	0.0	0.0226	0.0049	0.0	0.0050	0.0143	0.0227	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0020	0.0	0.0	0.0	2.982	0.647	0.0	0.663	1.827	2.992	0.0	0.0	0.0
STA AV	0.001	0.139	0.905	0.171	0.010	0.0	0.0	0.594	0.216	0.0	0.306	0.609	1.161	0.0	0.0	0.0

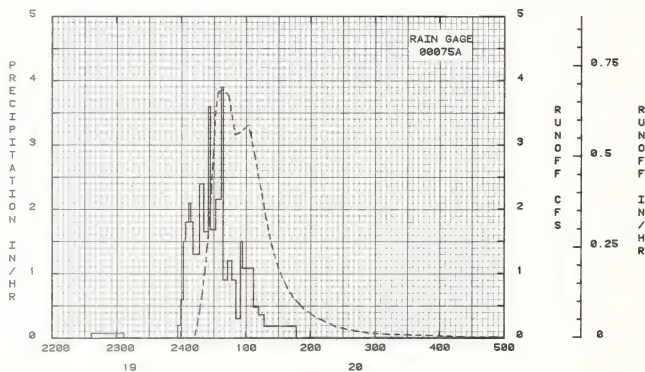
NOTES: To convert mean daily discharge in CFS to IN/DAT, multiply by 4.250295. Records began January 1, 1969.  
STA AV based on 3 yr (1969-71) record period.

1971 SELECTED RUNOFF EVENT											RIESEL (WACO), TEXAS WATERSHED T-14			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.				
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)				
EVENT OF OCTOBER 19 - 20, 1971														
RG 00075A														
10-19	0.90		10-19	2237	0.0	0.0	10-20	11	0.0	0.0				
10-20		0.0		2307	0.0800	0.04		12	0.013	0.0				
				2357	0.0	0.04		13	0.054	0.0001				
				2400	0.1999	0.05		14	0.128	0.0004				
			10-20	2	0.6001	0.07		15	0.201	0.0010				
WATERSHED CONDITIONS:														
96% tilled, bare; 4% Bermuda-grass waterway, good cover.														
				4	1.5001	0.12		16	0.297	0.0017				
				7	1.7999	0.21		17	0.394	0.0027				
				9	2.1002	0.28		18	0.530	0.0040				
				11	1.7999	0.34		19	0.632	0.0060				
				17	1.2999	0.47		20	0.751	0.0079				
				21	2.4001	0.63		21	0.902	0.0102				
				25	1.6500	0.74		22	1.033	0.0129				
				27	3.5998	0.86		23	1.184	0.0167				
				32	1.6800	1.00		24	1.398	0.0203				
				37	2.1601	1.18		25	1.588	0.0244				
				39	3.9001	1.31		26	1.802	0.0291				
				43	0.9000	1.37		27	2.033	0.0357				
				47	1.2000	1.45		28	2.317	0.0417				
				51	0.9000	1.51		29	2.649	0.0486				
				55	0.3001	1.53		30	2.926	0.0582				
				57	1.4996	1.58		31	3.234	0.0667				
				102	1.0801	1.67		32	3.531	0.0761				
				107	1.0800	1.76		34	3.821	0.0950				
				112	0.8799	1.80		39	3.671	0.1549				
				117	0.3600	1.83		44	3.755	0.2103				
				147	0.1800	1.92		50	3.162	0.2725				
								54	3.191	0.3099				
								59	3.263	0.3568				
								102	3.307	0.3863				
								104	3.191	0.4065				

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.

1971 SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS				WATERSHED T-14			
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 19 - 20, 1971 (CONTINUED)											
								10-20	109	2.765	0.4898
									114	2.305	0.4866
									119	1.833	0.5101
									124	1.451	0.5820
									129	1.145	0.5609
									134	0.928	0.5767
									139	0.768	0.5890
									144	0.632	0.5992
									149	0.535	0.6081
									154	0.448	0.6152
									204	0.333	0.6268
									214	0.246	0.6352
									224	0.170	0.6414
									234	0.128	0.6458
									244	0.100	0.6491
									254	0.074	0.6517
									314	0.050	0.6553
									334	0.038	0.6579
									354	0.027	0.6598
									424	0.013	0.6616
									454	0.006	0.6624
									524	0.003	0.6628
									554	0.001	0.6630
									654	0.001	0.6632
									754	0.0	0.6633
									900	0.0	0.6633

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.



EVENT OF OCTOBER 19 - 20, 1971  
RIESEL (WACO), TEXAS WATERSHED T-14

## RIESEL (WACO), TEXAS WATERSHED W-12

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 9.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-12																					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																						
1971 P	0.0	1.52	0.28	3.41	2.31	0.63	10.62	3.21	2.12	4.24	6.70	7.04	61.08																						
Q	0.0	0.0	0.0	0.046	0.0	0.0	0.474	0.338	0.0	0.919	2.251	3.119	7.148																						
STA AV P	0.41	3.08	2.61	2.99	2.20	1.02	5.44	2.22	4.00	4.64	2.33	3.83	34.76																						
Q	0.008	0.067	0.075	0.058	0.0	0.0	0.237	0.169	0.023	0.434	0.752	1.192	3.810																						
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																			
Maximum Discharge				1 Hour				2 Hours				Maximum Volume for Selected Time Interval				6 Hours				12 Hours				1 Day				2 Days				8 Days			
Date		Rate		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.					
1971 11-17		1.912		11-17		1.278		11-17		2.018		11-17		2.205		11-17		2.244		12-8		2.637		12-8		2.734		12-2		3.119					
MAXIMUMS FOR PERIOD OF RECORD																																			
11-17		1.912		11-17		1.278		11-17		2.018		11-17		2.205		11-17		2.244		12-8		2.637		12-8		2.734		12-2		3.119					
1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971		1971					

NOTES: Watershed conditions: 97% grain sorghum; 3% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.039-3. Precipitation and runoff records began October 1, 1969, part year records are included in STA AV. Precipitation data obtained from rain gage W15. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.02E	0.04E	0.0	0.0	0.0	0.0	0.38	0.03E	0.0	0.0	1.03													
3	0.0	E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0													
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.28	0.0	0.21	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.07E	0.0	0.03E	0.0	1.01													
6	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.01E	0.0	0.17													
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.25	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.50													
9	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.07E	0.0	3.16													
10	0.0	0.0	0.0	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.01													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.17													
15	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	2.05	0.0	0.0	0.0	0.0	0.08E	0.0	0.0													
17	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.98													
18	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.27	0.0													
19	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.03E	0.93	0.0	0.0													
20	0.0	0.0	0.0	0.86	0.54	0.0	0.0	0.0	0.0	1.86	0.0	0.0													
21	0.0	0.15	0.0	0.0	0.0	0.57	3.42	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.07E	0.0	0.02E	0.0	0.0	0.74	0.0	0.45	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.02E	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.14	0.0	1.95	0.0	1.11	0.0	0.0	0.0													
25	0.0	1.05	0.08E	0.0	0.0	0.0	1.49	0.02E	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.03E	0.45	1.28	0.0	0.0	0.11	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.03E	0.47	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.23	0.0	0.0	1.45	0.0	0.0	0.0	0.0	0.02E													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.28	0.0	0.0	0.0	0.42													
31	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.05E	0.0	0.0	0.0	0.41													
TOTAL	0.0	1.52	0.28	3.41	2.31	1.63	10.62	3.21	2.12	4.28	6.70	7.06													
STA AV	0.41	3.08	2.61	2.99	2.20	1.02	5.44	2.22	4.00	4.64	2.33	3.93													

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W15. Records began October 1, 1969. STA AV based on 3 yr (1969-71) record period. Estimate codes may indicate that non-significant event totals are included.

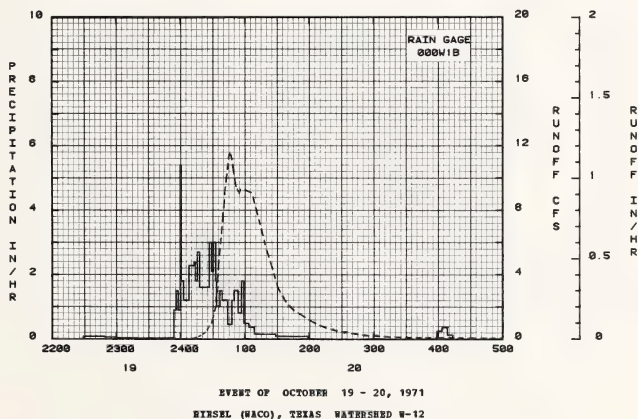
1971 MEAN DAILY DISCHARGE (cfs)													BIESEL (WACO), TEXAS WATERSHED #12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.128	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.053	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.096	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.038	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.874	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.063	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.382	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.382	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.001	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.073	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.057	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0006	0.0	0.0	0.0064	0.0085	0.0	0.0123	0.0312	0.0416	MEAN	0.0	0.0	0.0	0.0006	0.0	0.0	0.0064	0.0085	0.0	0.0123	0.0312	
INCHES	0.0	0.0	0.0	0.046	0.0	0.0	0.474	0.338	0.0	0.919	2.251	3.049	INCHES	0.0	0.0	0.0	0.046	0.0	0.0	0.474	0.338	0.0	0.919	2.251	
STA AV	0.0004	0.067	0.875	0.058	0.0	0.0	0.237	0.169	0.023	0.434	0.752	1.152	STA AV	0.0004	0.067	0.875	0.058	0.0	0.0	0.237	0.169	0.023	0.434	0.752	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.404207. STA AV based on 3 yr (1969-71) record period.

1971 SELECTED RUNOFF EVENT							BIESEL (WACO), TEXAS WATERSHED #12						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF OCTOBER 19 - 20, 1971													
RG 000W1B													
10-19			10-19	2229	0.0	0.0	10-20	1	0.0	0.0			
10-20	0.76	0.0		2249	0.0900	0.03		3	0.0	0.0			
				2259	0.0600	0.04		5	0.001	0.0			
				2354	0.0218	0.06		7	0.003	0.0			
				2356	0.9002	0.09		9	0.010	0.0			
WATERSHED CONDITIONS:													
97% oak, recently planted													
not established; 3X grassed													
waterway, good cover													
			10-20	2358	1.4998	0.14		11	0.034	0.0001			
				2400	0.8998	0.17		13	0.063	0.0003			
				1	5.3998	0.26		15	0.102	0.0006			
				3	1.7999	0.32		17	0.158	0.0010			
				8	1.2001	0.42		19	0.217	0.0017			
				13	2.2800	0.61		21	0.292	0.0025			
				14	2.3996	0.65		23	0.421	0.0038			
				16	1.7999	0.71		25	0.574	0.0054			
				18	2.6999	0.80		27	0.785	0.0078			
				24	1.6000	0.96		29	1.004	0.0106			
				27	1.6000	1.04		31	1.454	0.0149			
				29	3.0002	1.14		32	1.756	0.0174			
				31	2.0998	1.21		33	1.997	0.0203			
				33	3.0002	1.31		34	2.949	0.0251			
				34	1.7999	1.34		35	4.035	0.0306			
				37	1.0001	1.39		36	4.905	0.0376			
				39	1.4996	1.44		37	5.629	0.0458			
				44	1.2001	1.54		38	6.280	0.0575			
				48	0.4500	1.57		39	7.000	0.0679			
				50	1.2003	1.61		40	7.847	0.0795			
				52	1.4996	1.66		41	8.673	0.0924			
				54	1.5001	1.71		42	9.463	0.1101			
				57	0.8002	1.75		43	9.964	0.1253			
				59	1.7999	1.81		44	10.605	0.1414			
				104	0.4500	1.85		45	11.240	0.1628			
				109	0.3600	1.88		46	11.565	0.1806			
				129	0.1500	1.93		47	11.467	0.1986			
				159	0.0800	1.97		48	11.143	0.2163			
				359	0.0	1.97		49	10.762	0.2377			
				404	0.2399	1.99		50	10.266	0.2542			

1971 SELECTED RUNOFF EVENT			EISEL (WACO), TEXAS WATERSHED W-12						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF OCTOBER 19 - 20, 1971 (CONTINUED)									
10-20	409	0.3600	2.02	10-20	51	9.785	0.2699		
	414	0.1201	2.03		52	9.492	0.2850		
					53	9.319	0.3034		
					54	9.147	0.3179		
					55	9.038	0.3321		
					56	9.290	0.3464		
					101	9.233	0.4261		
					106	9.091	0.5014		
					108	8.755	0.5328		
					111	8.603	0.5721		
					116	6.716	0.6355		
					121	5.380	0.6852		
					126	4.331	0.7251		
					131	3.194	0.7575		
					136	2.560	0.7811		
					141	2.050	0.8000		
					146	1.756	0.8164		
					151	1.550	0.8300		
					156	1.344	0.8419		
					201	1.125	0.8525		
					206	0.956	0.8611		
					211	0.803	0.8683		
					216	0.677	0.8747		
					221	0.584	0.8799		
					226	0.489	0.8843		
					231	0.413	0.8882		
					241	0.309	0.8941		
					251	0.223	0.8986		
					301	0.171	0.9019		
					311	0.128	0.9044		
					321	0.102	0.9063		
					331	0.084	0.9079		
					401	0.058	0.9115		
					431	0.038	0.9139		
					501	0.029	0.9156		
					601	0.012	0.9177		
					800	0.002	0.9191		
					1000	0.001	0.9194		
					1200	0.0	0.9195		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.100175.



## RIESEL (WACO), TEXAS WATERSHED W-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												RIESEL (WACO), TEXAS WATERSHED W-13															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P	0.0	1.52	0.28	3.41	2.31	1.63	10.62	3.21	2.12	4.24	4.70	7.04	41.08													
	Q	0.0	0.0	0.0	0.039	0.0	0.0	0.229	0.191	0.0	0.763	2.009	3.272	6.502													
STA AV	P	0.41	3.08	2.61	2.99	2.20	1.02	5.44	2.22	4.00	4.64	2.33	3.83	34.76													
	Q	0.006	0.057	0.688	0.098	0.0	0.0	0.115	0.095	0.037	0.330	0.671	1.141	3.237													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge				1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days			
Date	Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1971	11-17	1.713	11-17	1.196	11-17	1.767	11-17	1.995	12- 9	2.247	12- 8	2.825	12- 8	2.973	12- 2	3.272											
MAXIMUMS FOR PERIOD OF RECORD																											
	11-17	1.713	11-17	1.196	11-17	1.767	11-17	1.995	12- 9	2.247	12- 8	2.825	12- 8	2.973	12- 2	3.272											
	1971		1971		1971	1971	1971	1971		1971		1971		1971		1971		1971		1971		1971		1971			

NOTES: Watershed conditions: 97% grain sorghum; 3% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42,000-3. Precipitation and runoff records began October 1, 1969, part year records are included in STA AV. Precipitation data obtained from rain gage W18. For long-time precipitation records, see National Weather Service records at Waco, Texas.

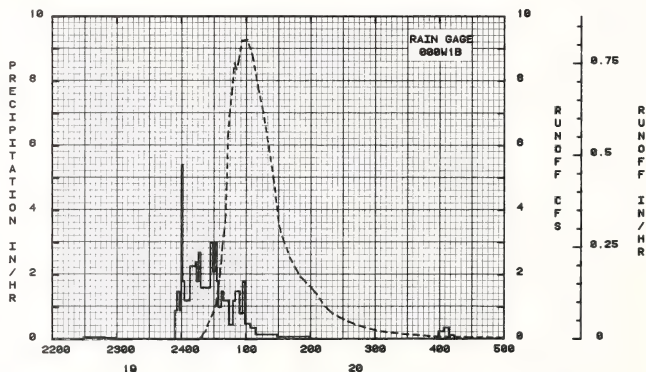
1971 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.02E	0.04E	0.0	0.0	0.0	0.0	0.38	0.03E	0.0	0.0	1.03													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0													
4	0.0	0.15	0.0	0.0	0.0	0.0	0.0	1.28	0.0	0.21	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.07E	0.0	0.03E	0.0	1.01													
6	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.07E	0.0	0.17													
7	0.0	0.0	0.0	0.0	0.02E	0.0	0.25	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.50													
9	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.07E	0.0	3.16													
10	0.0	0.0	0.0	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.01													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.17													
15	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	2.05	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0													
17	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	3.98	0.03E													
18	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.27	0.0													
19	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.01E	0.93	0.0	0.0													
20	0.0	0.0	0.0	0.86	0.54	0.0	0.0	0.0	0.0	1.86	0.0	0.0													
21	0.0	0.15	0.0	0.0	0.0	0.57	3.42	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.07E	0.0	0.02E	0.0	0.0	0.74	0.0	0.45	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.02E	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.14	0.0	1.95	0.0	1.11	0.0	0.0	0.0													
25	0.0	1.05	0.08E	0.0	0.0	0.0	1.49	0.02E	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.03E	0.45	1.28	0.0	0.0	0.11	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.03E	0.47	0.0	0.0	0.0	0.0	0.05E													
29	0.0	0.0	0.0	0.23	0.0	0.0	1.45	0.0	0.0	0.0	0.0	0.02E													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.28	0.0	0.0	0.0	0.42													
31	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.41													
TOTAL	0.0	1.52	0.28	3.41	2.31	1.63	10.62	3.21	2.12	4.24	4.70	7.04													
STA AV	0.41	3.08	2.61	2.99	2.20	1.02	5.44	2.22	4.00	4.64	2.33	3.83													

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42,002-1. Precipitation values are from rain gage W18. Records began October 1, 1969. STA AV based on 3 yr (1969-71) record period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT				BIESSEL (WACO), TEXAS WATERSHED W-13							
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 19 - 20, 1971 (CONTINUED)											
			10-20	109	0.3600	1.88	10-20	101	9.288	0.2787	
				129	0.1500	1.93		106	8.775	0.3437	
				159	0.0800	1.97		111	7.810	0.4034	
				359	0.0	1.97		116	7.010	0.4593	
				404	0.2399	1.99		121	5.953	0.5060	
				409	0.3600	2.02		126	4.865	0.5489	
				414	0.1201	2.03		131	3.456	0.5763	
								136	2.966	0.5994	
								141	2.521	0.6192	
								146	2.199	0.6370	
								151	1.929	0.6519	
								156	1.747	0.6651	
								201	1.586	0.6777	
								206	1.390	0.6884	
								211	1.126	0.6975	
								216	0.928	0.7052	
								221	0.798	0.7114	
								226	0.700	0.7168	
								231	0.608	0.7217	
								241	0.460	0.7294	
								251	0.355	0.7354	
								301	0.272	0.7400	
								311	0.215	0.7435	
								321	0.179	0.7464	
								331	0.142	0.7488	
								341	0.117	0.7507	
								351	0.092	0.7522	
								401	0.074	0.7534	
								431	0.047	0.7561	
								501	0.039	0.7580	
								601	0.017	0.7605	
								701	0.008	0.7616	
								801	0.004	0.7621	
								901	0.003	0.7624	
								1001	0.001	0.7626	
								1201	0.0	0.7627	

NOTES: To convert runoff in CFS to IZ/HR, multiply by 0.087764.



EVENT OF OCTOBER 19 - 20, 1971  
BIESSEL (WACO), TEXAS WATERSHED W-13

## OXFORD, MISSISSIPPI WATERSHED W-4C

LOCATION: Marshall Co., Miss.; 4.8 mi. SE of Holly Springs, on State Highway No. 4; Chew Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1580.00 acres 2.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-4C	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971 P	4.58	6.78	3.68	3.12	3.28	2.64	3.09	2.40	2.99	0.51	1.90	4.67	39.61	
Q	0.663	2.291	0.270	0.089	0.058	0.034	0.008	0.008	0.009	0.0	0.0	0.038	3.468	
STA AV P	3.70	4.82	4.74	4.91	3.99	3.08	3.72	3.69	4.62	2.52	4.12	5.18	49.10	
Q	0.610	1.019	0.852	0.707	0.275	0.112	0.188	0.215	0.321	0.113	0.447	0.680	5.540	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge		Maximum Volume for Selected Time Interval												
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days						
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1971	2-21	0.782	2-21	0.673	2-21	0.968	2-21	1.327	2-21	1.542	2-21	1.809	2-21	1.939 2-19 2.042
MAXIMUMS FOR PERIOD OF RECORD														
2-23	0.840	2-23	0.720	2-23	1.130	3-4	1.560	3-4	1.620	1-31	2.380	1-30	3.340	1-27 3.900
1962	1962	1962	1962	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964

NOTES: Watershed conditions: About 14% in cultivation (cotton), fair cover November to March, poor cover April and May improving to good by mid-July; 40% in pasture and idle land, good cover April to October with fair cover remainder of year; 45% in woods, good cover; 18 bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970-72. Reported as Watershed W-4 prior to 1965 and from 1965-68 as Watershed W-4A; redesignated as W-4C (1969). Gaging station relocated upstream, Jan. 1965, reducing drainage area from 2,000 to 1,580 acres. About 31% of drainage area above small desilting and retention dams. For rap of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-1-4. Monthly precipitation Thiessen weighted from rain gages 7, 8 and 18. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

1971 DAILY AIR TEMPERATURE (degrees F)													OXFORD, MISSISSIPPI WATERSHED W-4C	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		
1	39 27	31 18	60 40	71 43	66 48	84 49	80 68	77 56	86 70	88 62	78 55	45 37		
2	50 29	33 18	73 41	60 31	78 47	82 56	90 69	83 61	84 70	89 62	82 60	49 33		
3	56 35	36 23	59 30	58 31	69 36	88 57	88 59	82 68	85 70	87 62	83 47	43 34		
4	61 41	49 33	52 18	70 38	63 36	87 66	90 65	85 70	85 70	87 63	61 28	40 37		
5	41 24	63 29	46 16	72 42	72 37	89 65	89 66	85 67	87 71	84 60	65 28	43 38		
6	29 21	50 24	62 30	54 52	75 60	91 68	92 69	88 68	86 69	73 51	67 32	53 42		
7	30 15	54 23	65 27	39 30	80 67	90 67	90 67	88 67	88 68	80 45	64 29	61 48		
8	26 15	46 18	45 26	62 31	80 55	78 67	90 70	90 68	88 66	77 43	46 23	51 45		
9	30 25	23 3	48 26	72 33	72 52	88 63	93 70	90 69	87 65	79 51	58 23	56 45		
10	50 29	21 3	65 32	73 48	77 56	83 63	93 70	87 68	88 65	72 35	58 26	72 49		
11	48 37	43 9	54 32	76 54	78 62	89 64	92 71	87 70	85 66	65 40	62 36	73 38		
12	65 40	55 30	60 37	80 53	70 59	90 69	92 70	90 65	90 58	77 42	71 38	63 36		
13	63 51	47 23	72 49	80 57	64 45	93 70	92 70	83 58	84 53	61 50	75 46	63 37		
14	67 54	28 15	72 54	79 36	64 39	93 68	97 63	85 58	85 54	76 51	78 57	60 38		
15	73 51	45 22	80 52	67 35	72 39	92 68	95 75	85 60	93 64	81 50	78 56	70 50		
16	46 23	57 30	67 37	75 37	76 48	86 65	95 72	85 60	90 65	82 59	75 39	65 44		
17	45 24	67 39	62 29	80 47	82 53	88 62	92 67	86 60	89 63	84 56	74 39	63 45		
18	51 31	68 46	60 29	82 61	82 54	88 63	92 70	84 63	81 57	85 65	75 39	51 25		
19	32 18	71 43	62 37	80 50	80 60	91 64	96 73	87 63	83 64	78 59	65 46	47 25		
20	28 11	63 42	52 33	85 52	81 58	87 71	85 64	90 65	79 56	80 51	46 32	60 37		
21	40 11	64 40	50 32	83 56	77 47	89 69	81 55	92 65	63 47	75 52	63 37	48 38		
22	51 33	68 38	54 32	76 46	81 48	87 67	83 55	91 72	73 50	75 64	52 26	63 35		
23	65 34	38 32	60 37	78 49	77 53	86 62	89 56	96 66	77 59	75 56	44 26	57 36		
24	55 32	88 25	87 27	63 39	83 63	90 63	93 65	86 63	80 51	73 52	63 33	58 44		
25	55 41	68 26	48 28	72 44	80 54	93 68	77 69	89 63	82 63	69 50	44 30	59 46		
26	61 39	70 47	39 34	79 47	78 50	96 73	82 70	90 67	86 67	73 49	50 33	67 48		
27	49 21	70 35	41 28	85 51	85 51	97 73	85 65	91 59	80 67	78 50	53 40	70 53		
28	33 20	62 35	65 33	80 57	75 54	90 65	81 66	84 54	85 68	80 51	53 32	70 43		
29	50 29		58 45	75 55	79 42	89 65	82 71	80 56	87 66	84 52	60 38	50 39		
30	62 33		56 29	60 49	73 42	91 66	86 66	84 62	88 63	82 52	47 37	66 43		
31	64 22		62 28		78 48		70 52	83 67		79 55		67 35		
1 AV.	49 29	51 28	58 33	72 45	75 50	89 65	88 66	87 64	84 63	79 53	63 37	58 40		
MEAN	38.9	39.4	45.6	58.7	62.8	77.1	77.3	75.3	73.4	66.1	50.0	49.2		
STA AV	47 28	52 31	60 37	72 50	80 57	86 64	89 68	89 67	82 60	73 48	62 38	51 31		

NOTES: Temperature data from National Weather Service at Holly Springs, 48, Mississippi. STA AV is for 15 yr (1957-71) record period.

1971 DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-NC	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.56	0.0	0.12	0.0	0.0	0.07	0.0	0.0	0.0	
2	0.0	0.0	0.15	0.0	0.04	0.0	0.0	0.0	0.04	0.0	0.23	0.45	
3	0.23	0.10	0.04	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.47	
4	0.39	0.63	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.02	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.07	0.0	0.43	0.0	0.16	
6	0.0	0.0	0.34	0.0	0.0	0.42	0.35	0.14	0.0	0.0	0.36	0.22	
7	0.0	0.04	0.17	0.16	0.37	0.01	0.0	0.0	0.01	0.0	0.01	0.01	
8	0.0	0.04	0.0	0.0	0.04	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
9	0.0	0.0	0.22	0.0	0.0	0.16	0.53	0.0	0.0	0.05	1.22	0.0	
10	0.0	0.0	0.17	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.0	
11	0.02	0.0	0.0	0.0	0.18	0.0	0.0	0.07	0.0	0.0	0.0	0.0	
12	0.0	1.03	0.0	0.0	1.63	0.0	0.0	0.0	0.0	0.0	0.43	0.0	
13	0.03	0.0	0.54	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.01	0.0	
14	0.79	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.40	0.0	
15	0.0	0.0	0.16	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.43	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.78	0.0	0.0	0.04	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.82	0.03	0.0	0.37	0.0	0.06	0.0	0.0	0.50	0.0	
19	0.0	0.71	0.0	0.0	0.0	0.01	0.02	0.98	0.0	0.03	0.10	0.0	
20	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	
21	0.25	3.70	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	1.10	0.0	0.0	0.06	0.0	0.0	0.0	0.17	0.0	0.0	0.01	0.0	
23	0.35	0.0	0.0	0.68	0.0	0.0	0.11	0.0	0.0	0.04	0.12	0.0	
24	1.42	0.0	0.0	0.0	0.69	0.0	1.71	0.0	0.01	0.0	0.0	0.0	
25	0.0	0.03	1.22	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.52	0.0	0.0	0.0	0.0	0.04	0.97	0.67	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.40	0.16	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.37	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.59	0.10	
29	0.0	0.05	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	
30	0.0	0.0	0.20	0.0	0.0	0.0	0.17	0.07	0.0	0.0	0.0	0.52	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	
TOTAL	4.58	6.78	3.68	3.12	3.28	2.64	3.09	2.40	2.99	0.51	1.90	4.67	
STA AV	3.70	4.82	4.74	4.91	3.99	3.08	3.72	3.69	4.62	2.52	4.12	5.18	

NOTES: Daily precipitation values Thiessen weighted from rain gages 7, 8 and 16. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												OXFORD, MISSISSIPPI WATERSHED W-NC	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.47	1.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.47	0.81	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	
3	0.0	0.09	0.87	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
4	0.67	2.17	0.47	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.79	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.05	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.47	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.10	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.88	
10	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.18	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.35	0.47	0.0	2.36	0.0	0.0	0.0	0.0	0.0	0.0	0.13	
13	0.0	0.86	1.75	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	2.33	0.29	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	
15	0.0	0.29	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	
16	0.0	0.29	0.13	0.0	0.0	1.66	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.29	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.29	0.13	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	2.75	0.07	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.48	0.0	0.07	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	
21	0.0	106.84	0.0	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	5.60	21.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	1.80	3.23	0.0	2.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	29.78	0.47	0.0	0.0	1.05	0.0	0.44	0.0	0.0	0.0	0.0	0.0	
25	1.26	0.47	6.91	0.0	0.14	0.0	0.10	0.0	0.0	0.0	0.0	0.0	
26	0.47	0.47	0.69	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	
27	0.47	0.47	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.47	0.47	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.47	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.47	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	
31	0.24	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	1.4204	5.4326	0.5780	0.1975	0.1234	0.0749	0.0175	0.0162	0.0193	0.0	0.0	0.0821	
INCHES	0.663	2.251	0.270	0.089	0.058	0.034	0.008	0.009	0.0	0.0	0.0	0.038	
STA AV	0.610	1.019	0.852	0.707	0.275	0.112	0.188	0.215	0.321	0.113	0.447	0.680	

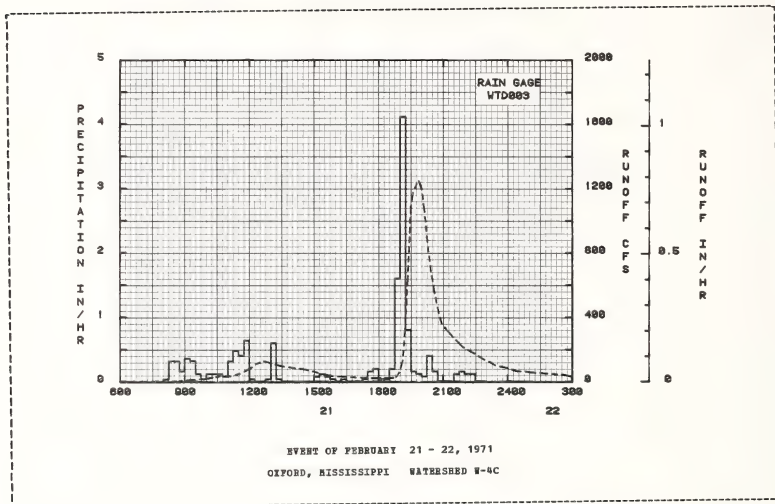
NOTES: To convert discharge in CFS to IIS/DAY, multiply by 0.01506. STA AV based on 15 yr (1957-71) record period. Quality of records: Good, estimated to be within 10% of actual.

1971 SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-4C			
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF FEBRUARY 21 - 22, 1971											
RG WTD003				RG WTD003							
2-21	0.28	0.004	2-21	800	0.0	0.0	2-21	628	2.767	0.0	
				815	0.0400	0.01		702	1.435	0.0007	
				830	0.3200	0.09		746	1.734	0.0014	
				885	0.3200	0.17		814	1.435	0.0019	
				900	0.1600	0.21		824	3.158	0.0021	
WATERSHED CONDITIONS:				915	0.3600	0.30		838	3.572	0.0026	
About 14% of area in cultivation, primarily cotton,				930	0.3191	0.38		844	5.982	0.0029	
ryegrass and corn, poor to fair cover provided by resi-				945	0.1200	0.41		852	6.531	0.0034	
due from 1970 crop; 40% in pasture and idle land with				1000	0.0400	0.42		914	10.911	0.0054	
fair to good cover; 45% in woods, good cover; 1% bare				1015	0.1200	0.45		952	15.690	0.0107	
gullies.				1030	0.1200	0.48		1018	26.936	0.0165	
				1045	0.1200	0.51		1028	28.554	0.0194	
				1100	0.0800	0.53		1038	35.606	0.0228	
				1115	0.3200	0.61		1100	35.606	0.0310	
				1130	0.4800	0.73		1108	33.792	0.0339	
				1145	0.4000	0.83		1128	46.326	0.0423	
				1200	0.6400	0.99		1134	48.128	0.0453	
				1215	0.0400	1.00		1152	69.000	0.0564	
				1230	0.0	1.00		1208	89.526	0.0657	
				1245	0.0	1.00		1218	110.056	0.0801	
				1300	0.0400	1.01		1230	120.121	0.0946	
				1315	0.6000	1.16		1240	126.432	0.1075	
				1330	0.0397	1.17		1300	114.000	0.1327	
				1345	0.0	1.17		1324	186.704	0.1594	
				1445	0.0	1.17		1354	87.728	0.1887	
				1500	0.0	1.17		1430	77.000	0.2197	
				1515	0.0800	1.19		1458	62.600	0.2401	
				1530	0.1200	1.22		1528	44.536	0.2569	
				1545	0.0800	1.24		1552	35.606	0.2670	
				1600	0.0400	1.25		1630	28.554	0.2798	
				1615	0.0	1.25		1714	24.000	0.2919	
				1630	0.0400	1.26		1742	21.502	0.2986	
				1645	0.0	1.26		1806	21.502	0.3040	
				1700	0.0	1.26		1828	22.703	0.3091	
				1715	0.0	1.26		1842	25.412	0.3126	
				1730	0.0400	1.27		1850	30.248	0.3149	
				1745	0.1600	1.31		1858	57.195	0.3186	
				1800	0.2000	1.36		1908	132.850	0.3285	
				1815	0.0400	1.37		1914	329.600	0.3430	
				1830	0.0400	1.38		1922	657.866	0.3843	
				1845	0.2000	1.43		1930	1093.999	0.4577	
				1900	1.6000	1.83		1936	1173.999	0.5288	
				1915	4.1200	2.86		1946	1230.000	0.6546	
				1930	0.8000	3.06		1952	1245.998	0.7322	
				1945	0.1600	3.10		2000	1193.999	0.8345	
				2000	0.1200	3.13		2008	1053.854	0.9285	
				2015	0.0800	3.15		2016	867.000	1.0089	
				2030	0.4000	3.25		2026	684.357	1.0900	
				2045	0.1600	3.29		2036	549.000	1.1585	
				2100	0.0	3.29		2048	425.948	1.2157	
				2115	0.0	3.29		2056	357.600	1.2485	
				2130	0.0	3.29		2112	315.600	1.3049	
				2145	0.1194	3.32		2128	276.520	1.3544	
				2200	0.1600	3.36		2144	239.280	1.3976	
				2215	0.1200	3.39		2158	208.920	1.4304	
				2230	0.1200	3.42		2214	189.480	1.4637	
				2245	0.0	3.42		2228	172.995	1.4903	
				2300	0.0	3.42		2242	152.520	1.5141	
								2256	135.000	1.5351	
								2314	118.056	1.5589	
								2326	100.563	1.5726	
								2344	91.336	1.5907	
								2400	84.152	1.6054	
								24	64.400	1.6240	
								52	60.800	1.6423	
								118	55.384	1.6581	
								152	48.128	1.6765	
								234	42.759	1.6965	
								346	32.000	1.7247	
								548	28.554	1.7633	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000628. Thiessen weighted storm rainfall, rain pages 7, 8 and 18. For 30-day antecedent P and Q, see tables on p. 62.001-2.

1971 SELECTED RUNOFF EVENTS						OXFORD, MISSISSIPPI WATERSHED W-4C			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Date	Acc.
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	No-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 21 - 22, 1971 (CONTINUED)									
						2-22	1148	16,552	1.8482
							1828	8,911	1.9015
							2400	5,982	1.9274

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000628. Thiessen weighted storm rainfall, rain gages 7, 8 and 18. For 30-day antecedent P and Q, see tables on p. 62.001-2.



## OIFORD, MISSISSIPPI WATERSHED W-5

LOCATION: Marshall Co., Miss.; 6.1 mi. SW of Holly Springs, on State Highway No. 4; Willie Wilkins Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1000.00 acres 1.56 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI		WATERSHED W-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
P	4.59	6.96	3.99	3.36	3.08	3.60	2.64	3.60	3.56	0.62	1.81	4.79	42.56			
1971 Q	1.976	4.621	0.874	0.331	0.286	0.263	0.012	0.036	0.081	0.0	0.0	0.321	8.801			
STA AV P	3.76	4.81	4.91	4.97	4.13	3.20	3.67	3.96	4.57	2.45	4.18	5.27	49.89			
Q	1.359	1.982	1.860	1.456	0.714	0.350	0.287	0.394	0.508	0.211	0.777	1.613	11.511			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge				Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	2-21	1.626	2-21	1.152	2-21	1.468	2-21	1.886	2-21	2.596	2-21	3.162	2-21	3.253
	2-19		3.636											
MAXIMUMS FOR PERIOD OF RECORD														
	2-21	1.626	2-21	1.152	3-4	1.630	3-4	2.120	2-9	2.800	2-21	3.162	1-30	3.720
1971	1971	1971	1964	1964	1964	1966	1971	1957	1957					

NOTES: Watershed conditions: About 26% in cultivation (cotton, ryegrass and soybeans), fair cover November to March, poor cover April and May improving to good by mid-July; 47% in pasture and idle land, good cover April to October with fair cover remainder of year; 26% in woods, good cover; 1% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970-72. About 31% of drainage area above small deslitting and retention dams. For map of watershed, see Selected Runoff Events for Small Agricultural Watersheds in the United States, ARS, SWC, January 1960, p. 62-2-3. Monthly precipitation Thiessen weighted from rain gages 8 and 33. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, MS, Mississippi.

1971 DAILY PRECIPITATION (inches)													OIFORD, MISSISSIPPI WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.59	0.0	0.29	0.0	0.0	0.07	0.0	0.0	0.0		
2	0.0	0.0	0.19	0.0	0.03	0.0	0.0	0.0	0.81	0.0	0.12	0.0		0.47
3	0.20	0.12	0.06	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		0.48
4	0.41	0.75	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.02	0.0	0.0		0.0
5	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.06	0.0	0.54	0.0	0.15		
6	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.38	0.21		
7	0.0	0.11	0.0	0.0	0.0	0.48	0.0	0.05	0.0	0.0	0.0	0.01		
8	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.24	0.0	0.0	0.0	0.07	0.83	0.0	0.0	0.06	1.11		
10	0.0	0.0	0.19	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
11	0.02	0.0	0.0	0.0	0.18	0.0	0.0	0.18	0.0	0.0	0.0	0.0		
12	0.0	1.11	0.0	0.0	1.58	0.0	0.0	0.0	0.0	0.0	0.0	0.47		
13	0.01	0.0	0.68	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
14	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41		
15	0.0	0.0	0.19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.50		
16	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.98	0.0	0.0	0.04		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.43	0.13	0.0	0.52	0.0	0.0	0.0	0.0	0.51	0.0		
19	0.0	0.76	0.0	0.0	0.0	0.0	0.02	0.0	0.99	0.0	0.04	0.10		
20	0.0	0.0	0.0	1.13	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
21	0.26	3.50	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	1.14	0.0	0.02	0.11	0.0	0.0	0.0	0.24	0.0	0.0	0.03	0.0		
23	0.35	0.0	0.0	0.64	0.0	0.0	0.04	0.0	0.0	0.02	0.12	0.0		
24	1.83	0.0	0.0	0.0	0.50	0.0	1.71	0.0	0.0	0.03	0.0	0.0		
25	0.0	0.03	1.18	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.49	0.0	0.0	0.0	0.0	0.0	1.26	0.63	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.41	0.21	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.38	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.55	0.15		
29	0.0	0.0	0.03	0.21	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.03		
30	0.0	0.0	0.0	0.20	0.0	0.0	0.20	0.17	0.0	0.0	0.0	0.56		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0		
TOTAL	4.59	6.96	3.99	3.36	3.08	3.60	2.68	3.60	3.56	0.62	1.81	4.79		
STA AV	3.76	4.81	4.91	4.97	4.13	3.20	3.67	3.96	4.57	2.45	4.18	5.27		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62-001-1). Daily precipitation values Thiessen weighted from rain gages 8 and 33. STA AV based on 15 yr (1957-71) record period.

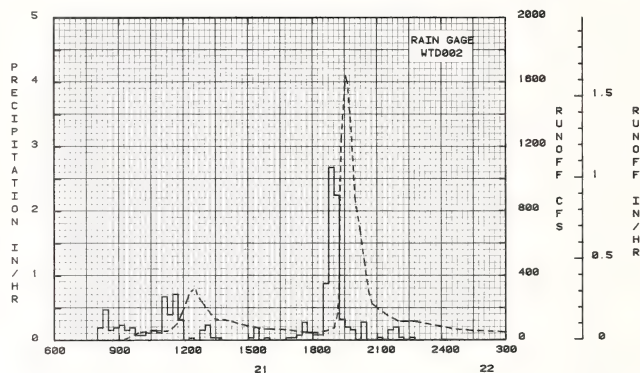


1971 SELECTED RUNOFF EVENT					OXFORD, MISSISSIPPI					WATERSHED #=5				
ANTECEDENT CONDITIONS					RAINFALL					RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 21 - 23, 1971 (CONTINUED)														
2-21	1630	0.0	1.28	2-21	1328	131.195	0.5159							
	1645	0.0	1.28		1336	126.326	0.5329							
	1700	0.0400	1.29		1352	127.128	0.5664							
	1715	0.0400	1.30		1404	121.128	0.5510							
	1730	0.0800	1.32		1414	117.655	0.6107							
	1745	0.2800	1.39		1430	105.800	0.6803							
	1800	0.1200	1.42		1444	96.700	0.6637							
	1815	0.0800	1.44		1500	88.300	0.6882							
	1830	0.0800	1.46		1516	80.600	0.7105							
	1845	0.8800	1.68		1532	75.700	0.7312							
	1900	2.6800	2.35		1550	70.026	0.7529							
	1915	2.2810	2.91		1614	68.000	0.7803							
	1930	0.3200	2.99		1644	65.528	0.8134							
	1945	0.2000	3.04		1714	56.600	0.8437							
	2000	0.1600	3.08		1728	50.600	0.8561							
	2015	0.0	3.08		1758	45.800	0.8800							
	2030	0.2800	3.15		1814	47.600	0.8923							
	2045	0.0	3.15		1832	54.200	0.9074							
	2100	0.0	3.15		1844	60.800	0.9188							
	2115	0.0400	3.16		1900	75.700	0.9369							
	2130	0.0	3.16		1910	166.626	0.9569							
	2145	0.1600	3.20		1914	352.468	0.9741							
	2200	0.2000	3.25		1916	808.000	0.9933							
	2215	0.0400	3.26		1920	1249.896	1.0613							
	2230	0.0	3.26		1930	1574.998	1.2945							
	2245	0.0400	3.27		1932	1639.998	1.3478							
					1938	1589.996	1.5081							
					1948	1289.996	1.7459							
					1958	884.477	1.9257							
					2012	682.000	2.1070							
					2024	489.781	2.2232							
					2036	303.594	2.3019							
					2046	223.952	2.3455							
					2104	190.100	2.4071							
					2118	168.438	2.4486							
					2130	148.800	2.4801							
					2150	127.128	2.5257							
					2158	117.000	2.5418							
					2206	114.200	2.5571							
					2228	114.200	2.5986							
					2234	116.300	2.6100							
					2244	112.800	2.6289							
					2248	114.200	2.6364							
					2302	107.900	2.6621							
					2316	100.900	2.6863							
					2330	93.900	2.7088							
					2346	88.300	2.7329							
					2400	83.400	2.7528							
					28	69.336	2.7881							
					56	62.595	2.8186							
					128	57.200	2.8503							
					158	54.200	2.8779							
					242	50.000	2.9158							
					328	45.800	2.9522							
					356	42.200	2.9726							
					410	44.000	2.9826							
					436	40.400	3.0007							
					526	38.600	3.0333							
					558	36.784	3.0532							
					636	37.395	3.0765							
					718	34.328	3.1018							
					806	33.136	3.1282							
					848	32.559	3.1510							
					900	29.928	3.1572							
					914	25.500	3.1636							
					928	19.438	3.1688							
					946	16.136	3.1741							
					1012	12.189	3.1802							
					1044	9.000	3.1858							
					1112	6.631	3.1894							
					1134	5.700	3.1916							
					1202	4.800	3.1940							
					1300	4.508	3.1985							
					1436	4.508	3.2057							
					1918	3.669	3.2248							

NOTES: To convert runoff in CFS to in/hr, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.

1971      SELECTED RUNOFF EVENT      OXFORD, MISSISSIPPI      WATERSHED W-5										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF FEBRUARY 21 - 23, 1971 (CONTINUED)										
							2-22	2400	2.900	3.2401
							2-23	2400	1.548	3.2930

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.



EVENT OF FEBRUARY 21 - 23, 1971  
OXFORD, MISSISSIPPI      WATERSHED W-5

## OXFORD, MISSISSIPPI WATERSHED W-10

LOCATION: Marshall Co., Miss.; 3.3 mi. NW of Chulahoma, on County road; Dry Fork Creek, Pigeon Roost Creek Watershed, Tazoo River Basin.

AREA: 5530.00 acres 8.64 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI				WATERSHED W-10			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual								
1971	P	0.54	6.21	3.95	3.24	3.19	4.31	2.36	7.20	3.13	0.60	2.13	5.20	46.06							
	Q	1.124	2.314	0.225	0.009	0.087	0.237	0.0	0.862	0.009	0.0	0.0	0.0	4.867							
STA AV	P	3.89	5.00	4.98	5.04	4.58	3.25	3.90	4.03	4.46	2.51	4.38	5.51	51.52							
	Q	1.098	1.395	1.497	1.164	0.741	0.218	0.361	0.385	0.440	0.147	0.589	1.249	9.283							
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																					
Maximum Discharge				Maximum Volume for Selected Time Interval																	
Date		Date		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days					
Date		Date		Vol.		Vol.		Date		Vol.		Date		Vol.		Date					
1971		8-26		0.438		8-26		0.381		8-26		0.539		2-21		0.642					
														2-21		1.068					
														2-21		1.581					
														2-20		1.732					
														2-14		1.907					
MAXIMUMS FOR PERIOD OF RECORD																					
7-9		1.180		7-9		1.060		7-9		1.650		2-23		2.130		2-23					
1967				1967				1967				1962		1962		1964					
														1964		1964					
														1957		1965					

NOTES: Watershed conditions: About 12% in cultivation (cotton, corn and soybeans), fair cover November to March, poor cover April and May improving to good by mid-July; 38% in pasture and idle land, good cover April to October with fair cover remainder of year; 48% in woods, good cover; 2% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1972. About 30% of drainage area above small desilting and retention dams. Monthly precipitation Thiessen weighted from rain gages 13, 14, 20, 24 and 26. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-3-3. Precipitation and runoff records began Jan. 1957. For long-time precipitation record see National Weather Service records at Holly Springs, 4W, Mississippi.

1971 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.63	0.0	0.54	0.0	0.0	0.22	0.0	0.0	0.0		
2	0.0	0.0	0.20	0.0	0.02	0.0	0.0	0.0	0.24	0.0	0.04	0.54		
3	0.31	0.11	0.07	0.0	0.0	0.0	0.0	0.06	0.05	0.0	0.0	0.54		
4	0.33	0.76	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.01	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.01	0.55	0.0	0.20		
6	0.0	0.0	0.33	0.0	0.0	0.0	0.08	1.26	0.0	0.0	0.44	0.25		
7	0.0	0.11	0.0	0.0	0.22	0.75	0.0	0.0	0.0	0.0	0.0	0.01		
8	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.25	0.0	0.0	0.0	0.07	1.30	0.0	0.06	1.24	0.0		
10	0.0	0.0	0.24	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.02		
11	0.02	0.01	0.0	0.0	0.13	0.0	0.0	0.28	0.0	0.0	0.0	0.0		
12	0.0	1.26	0.0	0.0	1.80	0.0	0.0	0.0	0.0	0.0	0.0	0.44		
13	0.00	0.0	0.39	0.05	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.04		
14	0.56	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.45		
15	0.0	0.0	0.21	0.0	0.0	0.11	0.0	0.0	0.0	0.01	0.0	0.52		
16	0.0	0.0	0.0	0.0	0.0	1.30	0.0	0.02	0.78	0.0	0.0	0.04		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.53	0.17	0.0	1.34	0.0	0.0	0.0	0.0	0.76	0.0		
19	0.0	0.82	0.0	0.0	0.0	0.0	0.02	0.0	1.13	0.0	0.06	0.11		
20	0.0	0.0	0.0	1.11	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
21	0.29	2.36	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	1.08	0.06	0.0	0.16	0.0	0.0	0.0	0.21	0.03	0.0	0.03	0.0		
23	0.43	0.0	0.0	0.44	0.0	0.0	0.06	0.0	0.0	0.03	0.12	0.0		
24	1.51	0.0	0.0	0.0	0.41	0.0	1.27	0.0	0.0	0.00	0.0	0.0		
25	0.0	0.03	1.21	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.66	0.0	0.0	0.0	0.0	0.01	3.23	0.63	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.29	0.18	0.0	0.0	0.01	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.61	0.15		
29	0.0	0.0	0.03	0.21	0.0	0.09	0.07	0.0	0.0	0.0	0.0	0.01		
30	0.0	0.0	0.0	0.20	0.0	0.0	0.18	0.27	0.0	0.0	0.0	0.64		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0		
TOTAL	4.54	6.21	3.95	3.24	3.19	4.31	2.36	7.20	3.13	0.60	2.13	5.20		
STA AV	3.89	5.00	4.98	5.04	4.58	3.25	3.90	4.03	4.46	2.51	4.38	5.51		

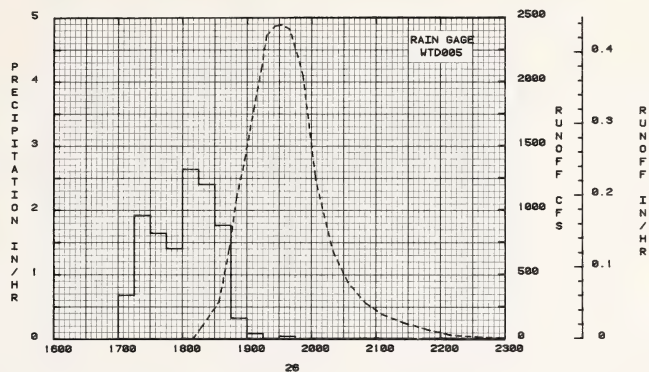
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 13, 14, 20, 24 and 26. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)											
OXFORD, MISSISSIPPI						WATERSHED W-10					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.0	0.07	0.0	0.0
2	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.0	0.07	0.0	0.0
3	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.0	0.07	0.0	0.0
4	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.0	0.07	0.0	0.0
5	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.03	0.07	0.0	0.0
6	0.07	0.19	0.19	0.07	0.07	0.07	0.0	36.80	0.07	0.0	0.0
7	0.07	0.19	0.19	0.07	0.07	0.07	0.0	7.91	0.07	0.0	0.0
8	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.03	0.07	0.0	0.0
9	0.07	0.19	0.19	0.07	0.07	0.07	0.0	14.91	0.07	0.0	0.0
10	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.07	0.07	0.0	0.0
11	0.07	0.14	0.19	0.07	0.08	0.07	0.0	0.07	0.07	0.0	0.0
12	0.07	86.50	0.19	0.07	17.23	0.07	0.0	0.07	0.07	0.0	0.0
13	0.07	0.34	0.19	0.07	0.57	0.07	0.0	0.07	0.07	0.0	0.0
14	0.07	0.19	0.19	0.07	0.07	0.07	0.0	0.07	0.07	0.0	0.0
15	0.07	0.19	0.19	0.07	0.07	0.08	0.0	0.07	0.07	0.0	0.0
16	0.07	0.19	0.19	0.07	0.07	11.65	0.0	0.07	0.07	0.0	0.0
17	0.07	0.19	0.19	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
18	0.07	0.17	0.19	0.07	0.07	41.99	0.0	0.07	0.07	0.0	0.0
19	0.07	42.13	0.19	0.07	0.07	0.21	0.0	0.07	0.07	0.0	0.0
20	0.07	0.37	0.19	0.07	0.07	0.05	0.0	0.07	0.07	0.0	0.0
21	0.06	296.73	0.19	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
22	17.67	106.75	0.19	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
23	0.18	0.58	0.19	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
24	237.38	0.37	0.19	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
25	3.34	0.26	47.39	0.07	0.07	0.0	0.0	0.16	0.07	0.0	0.0
26	0.19	0.22	0.07	0.07	0.07	0.0	0.0	139.11	0.07	0.0	0.0
27	0.19	0.16	0.07	0.07	0.07	0.0	0.0	0.04	0.07	0.0	0.0
28	0.19	0.18	0.07	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
29	0.19	0.07	0.07	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
30	0.19	0.07	0.07	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
31	0.19	0.07	0.07	0.07	0.07	0.0	0.0	0.07	0.07	0.0	0.0
MEAN	8.424	19.199	1.689	0.069	0.652	1.832	0.0	6.461	0.069	0.0	0.0
1 INCHES	1.124	2.114	0.225	0.009	0.087	0.237	0.0	0.862	0.009	0.0	0.0
STA AV	1.098	1.395	1.497	1.164	0.741	0.218	0.361	0.385	0.440	0.147	0.589

NOTES: To convert discharge in CFS to M<sup>3</sup>/DAY, multiply by 0.0003041. Quality of records is estimated to be within 20% of actual. STA AV based on 14 yr (Jan. 1957 thru Sept. 1965 and Oct. 1966 thru Dec. 1971) record period.

1971 SELECTED RUNOFF EVENT											
OXFORD, MISSISSIPPI						WATERSHED W-10					
ATTACHED CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Date	Time	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	Mo-Day	of Day	(inches)
EVENT OF AUGUST 26 - 27, 1971											
RG WTD005											
8-26	0.01	0.001	8-26	1700	0.0	8-26	1810	0.248	0.0		
				1715	0.6800		1820	119.000	0.0018		
				1720	1.9208		1834	284.398	0.0104		
				1745	1.6409		1844	724.998	0.0253		
				1800	1.4000		1850	1091.999	0.0418		
WATERSHED CONDITIONS:											
About 12% of area in cultivation, primarily cotton, corn, and soybeans; 38% in pasture and idle land, fair cover; 48% in woods, good cover; 2% in bare gullies.											
				1815	2.6400		1858	1398.999	0.0715		
				1830	2.4000		1906	1780.999	0.1094		
				1845	1.7602		1914	2137.758	0.1561		
				1900	0.3200		1918	2359.999	0.1829		
				1915	0.0800		1926	2434.998	0.2400		
				1930	0.0		1932	2442.500	0.2844		
				1945	0.0400		1940	2404.998	0.3421		
							1952	2046.999	0.4216		
							2004	1230.000	0.4813		
							2020	674.999	0.5267		
							2034	433.997	0.5500		
							2050	275.000	0.5669		
							2106	185.000	0.5779		
							2126	119.000	0.5870		
							2150	62.060	0.5935		
							2210	24.472	0.5961		
							2234	5.827	0.5973		
							2304	2.758	0.5979		
							2332	0.744	0.5980		
							2354	0.317	0.5980		
							2400	0.190	0.5980		
							102	0.141	0.5990		
							202	0.083	0.5980		
							332	0.058	0.5980		
							502	0.0	0.5980		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001793. Thiessen weighted storm rainfall, rain gages 13, 14, 20, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.003-1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-12

LOCATION: Marshall Co., Miss.; 5.6 mi. SW of Holly Springs, on county road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 22800.00 acres 35.60 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-12																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971	P	4.38	6.43	3.68	3.31	3.37	3.67	2.62	3.22	3.39	0.59	1.84	4.61	41.12																	
	Q	0.858	2.217	0.311	0.161	0.155	0.262	0.017	0.020	0.019	0.013	0.022	0.082	4.138																	
STA AV	P	3.72	4.80	4.77	4.89	4.21	3.22	3.83	3.81	4.39	2.41	4.16	5.20	49.41																	
	Q	0.727	1.133	1.119	0.839	0.506	0.215	0.219	0.238	0.276	0.105	0.410	0.824	6.612																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge														Maximum Volume for Selected Time Interval																	
Date		Date		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days															
Date		Date		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.					
1971	2-21	0.276	2-21	0.268	2-21	0.511	2-21	1.021	2-21	1.312	2-21	1.602	2-21	1.659	2-19	1.886															
MAXIMUMS FOR PERIOD OF RECORD																															
2-23		0.350		2-23		0.350		2-23		0.680		2-23		1.380		2-23		1.620		11-27		1.930		1-30		2.280		3-24		4.360	
1962				1962				1962				1962				1962				1968				1957				1965			

NOTES: Watershed conditions: About 17% in cultivation (cotton, corn, soybeans, ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 47% in woods, good cover; 1% in bare gullies; 7% urban. Percentages of total area in various land use categories are based on the latest survey completed in 1970-72. About 18% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-4-6. Monthly precipitation Thiessen weighted from 16 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4W, Mississippi.

1971 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.58	0.0	0.26	0.0	0.0	0.09	0.0	0.0	0.0													
2	0.0	0.0	0.17	0.0	0.03	0.0	0.0	0.01	0.44	0.0	0.04	0.44													
3	0.23	0.11	0.06	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0													
4	0.36	0.72	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.08	0.00	0.50	0.0	0.15													
6	0.0	0.0	0.33	0.0	0.0	0.12	0.07	0.38	0.02	0.0	0.36	0.22													
7	0.0	0.10	0.0	0.0	0.19	0.42	0.0	0.01	0.12	0.0	0.0	0.01													
8	0.0	0.10	0.0	0.0	0.0	0.13	0.0	0.00	0.01	0.0	0.0	0.0													
9	0.0	0.0	0.20	0.0	0.0	0.0	0.07	0.67	0.0	0.0	0.05	1.18													
10	0.0	0.0	0.20	0.0	0.22	0.0	0.0	0.11	0.0	0.0	0.0	0.03													
11	0.02	0.00	0.0	0.0	0.16	0.0	0.0	0.15	0.00	0.0	0.0	0.0													
12	0.0	1.08	0.0	0.0	1.62	0.0	0.0	0.0	0.0	0.0	0.0	0.41													
13	0.01	0.0	0.53	0.03	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.03													
14	0.64	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.37													
15	0.0	0.0	0.18	0.0	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.53													
16	0.0	0.0	0.0	0.0	0.0	1.69	0.0	0.0	0.78	0.0	0.0	0.04													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.45	0.11	0.0	0.65	0.0	0.01	0.0	0.0	0.63	0.0													
19	0.0	0.77	0.0	0.0	0.0	0.0	0.04	0.00	1.11	0.0	0.05	0.11													
20	0.0	0.0	0.0	1.09	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0													
21	0.29	3.03	0.0	0.31	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0													
22	1.13	0.0	0.01	0.08	0.0	0.0	0.0	0.27	0.0	0.0	0.02	0.0													
23	0.42	0.0	0.0	0.71	0.0	0.0	0.0	0.20	0.0	0.01	0.13	0.0													
24	1.19	0.0	0.0	0.0	0.82	0.0	0.0	1.58	0.0	0.04	0.0	0.0													
25	0.02	0.14	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.50	0.0	0.0	0.0	0.0	0.03	1.05	0.76	0.0	0.0	0.0													
27	0.10	0.0	0.0	0.0	0.27	0.18	0.0	0.0	0.09	0.0	0.0	0.0													
28	0.0	0.0	0.40	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.56	0.08													
29	0.0	0.04	0.22	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.02													
30	0.0	0.0	0.19	0.0	0.0	0.0	0.17	0.09	0.0	0.0	0.0	0.50													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0													
TOTAL	4.38	6.43	3.68	3.31	3.37	3.67	2.62	3.22	3.39	0.59	1.84	4.61													
STA AV	3.72	4.80	4.77	4.89	4.21	3.22	3.83	3.81	4.39	2.41	4.16	5.20													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62-804-1). Daily precipitation values Thiessen weighted from rain gages 4 thru 9, 13, 15, 16 thru 20, 25, 29 thru 31 and 33. STA AV based on 15 yr (1957-71) record period.

1971						OXFORD, MISSISSIPPI		WATERSHED #12				
MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.9	0.4	7.8	12.7	2.2	2.3	0.4	0.1	0.2	0.3	0.6	0.4
2	0.9	0.5	8.0	11.8	2.2	1.9	0.4	0.1	0.5	0.3	0.6	0.3
3	1.1	0.4	8.2	5.6	2.2	1.6	0.4	0.2	0.3	0.3	0.6	1.3
4	4.1	23.3	7.4	4.2	2.2	1.6	0.4	0.2	0.2	0.2	0.6	0.5
5	1.5	11.2	6.0	4.2	2.2	1.7	0.4	0.1	0.2	0.5	0.6	0.6
6	0.9	1.5	12.5	4.1	2.0	1.7	0.4	0.3	0.2	0.3	0.6	0.8
7	0.9	1.0	10.6	3.8	2.2	2.3	0.4	0.2	0.3	0.2	0.6	0.9
8	0.9	0.8	6.9	3.2	1.9	1.9	0.4	0.1	0.3	0.3	0.7	0.7
9	0.9	0.7	5.5	2.8	1.5	2.3	0.3	2.3	0.3	0.3	0.7	18.8
10	0.8	0.8	7.1	2.8	2.0	1.3	0.2	0.4	0.3	0.3	0.7	3.4
11	0.6	1.0	5.9	2.9	2.0	1.3	0.2	0.5	0.3	0.3	0.7	1.5
12	0.4	236.6	4.4	2.6	44.1	1.3	0.2	0.6	0.3	0.2	0.7	3.9
13	0.5	12.0	31.5	2.1	20.5	1.1	0.2	0.4	0.3	0.2	0.7	2.0
14	3.0	1.9	5.9	1.9	2.6	1.1	0.2	0.2	0.3	0.2	0.8	2.7
15	1.5	1.4	5.7	1.9	1.5	1.3	0.2	0.2	0.3	0.2	0.8	25.5
16	0.8	0.8	3.9	1.9	1.3	178.5	0.1	0.2	0.7	0.3	0.8	2.1
17	0.7	0.6	3.2	1.9	1.2	2.6	0.1	0.2	0.5	0.3	0.8	1.2
18	0.6	0.6	3.4	2.0	1.2	31.2	0.1	0.2	0.3	0.3	1.2	0.9
19	0.4	89.4	6.2	2.0	1.3	4.3	0.2	0.2	1.2	0.3	1.2	1.1
20	0.2	13.7	4.5	2.5	1.4	1.7	0.2	0.2	2.8	0.3	0.7	1.2
21	0.6	1233.1	4.7	25.9	1.4	1.1	0.2	0.2	0.3	0.4	0.7	1.1
22	106.2	381.5	4.7	3.0	1.3	0.9	0.1	0.4	0.2	0.6	0.7	1.0
23	36.4	30.7	4.7	32.4	1.0	0.8	0.3	0.1	0.2	0.6	0.7	0.9
24	620.0	10.6	4.6	8.0	24.9	0.7	7.5	0.1	0.1	0.6	0.7	0.9
25	26.5	8.3	80.4	2.4	8.2	0.7	1.8	0.1	0.2	0.6	0.7	0.8
26	3.8	42.1	12.5	1.7	2.3	0.7	0.3	8.7	5.5	0.7	0.7	0.7
27	2.4	10.3	5.5	1.9	3.0	0.9	0.2	1.5	0.9	0.7	0.7	0.8
28	1.7	8.6	5.2	1.9	2.5	0.8	0.2	0.4	0.6	0.6	0.8	0.7
29	1.1	11.9	2.1	2.1	0.6	0.2	0.4	0.2	0.6	0.6	0.9	0.7
30	0.8	4.8	2.5	2.2	0.5	0.2	0.4	0.3	0.6	0.7	0.8	0.8
31	0.5				2.2		0.1	0.3		0.6		0.9
MEAN	26.499	75.856	9.619	5.155	4.802	8.359	0.537	0.627	0.606	0.391	0.703	2.535
INCHES	0.858	2.217	0.311	0.161	0.155	0.262	0.017	0.020	0.019	0.013	0.022	0.082
STA 1V	0.727	1.133	1.119	0.839	0.506	0.215	0.219	0.238	0.276	0.105	0.310	0.824

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0010439. Quality of records: Good, estimated to be within 10% of actual. STA 1V based on 15 yr (1957-71) record period.

1971 SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI		WATERSHED #12			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF FEBRUARY 21 - 23, 1971											
RG WTD016											
2-21	0.0	0.001	2-21	145	0.0	0.0	2-21	456	5.347	0.0	
				200	0.0400	0.01		638	6.000	0.0004	
				215	0.0	0.01		812	6.491	0.0008	
				230	0.0002	0.01		830	8.615	0.0009	
				400	0.0	0.01		886	12.160	0.0010	
WATERSHED CONDITIONS:											
About 17% in cultivation, primarily cotton, corn, soybeans, ryegrass, poor to fair cover provided by residue from 1970 crop; 28% in pasture and idle land, fair to good cover; 47% in woods, good cover; 1% in bare gullies; 7% urban.											
				415	0.0	0.01		900	12.750	0.0011	
				430	0.2000	0.06		914	16.710	0.0012	
				445	0.2400	0.12		922	17.440	0.0013	
				500	0.2400	0.18		934	27.008	0.0015	
				515	0.0800	0.20		948	35.046	0.0018	
				530	0.0	0.20		1004	57.505	0.0023	
				545	0.0400	0.21		1014	73.350	0.0028	
				600	0.0	0.21		1030	121.813	0.0039	
				730	0.0	0.21		1046	172.290	0.0056	
				745	0.0005	0.21		1100	242.326	0.0077	
				800	0.0009	0.21		1114	295.736	0.0104	
				815	0.0400	0.22		1128	402.000	0.0139	
				830	0.3600	0.31		1140	500.000	0.0178	
				845	0.1600	0.35		1150	635.000	0.0219	
				900	0.1200	0.38		1208	838.000	0.0315	
				915	0.2000	0.43		1220	898.000	0.0390	
				930	0.3200	0.51		1234	1018.000	0.0487	
				945	0.4000	0.61		1240	1137.999	0.0534	
				1000	0.1200	0.64		1250	1347.999	0.0624	
				1015	0.0800	0.66		1306	1631.998	0.0797	
				1030	0.0800	0.68		1318	1869.998	0.0949	
				1045	0.2400	0.74		1330	2097.998	0.1122	
				1100	0.0800	0.76		1338	2177.997	0.1246	
				1115	0.2800	0.83		1348	2201.997	0.1405	
				1130	0.6800	1.00		1400	2161.997	0.1595	

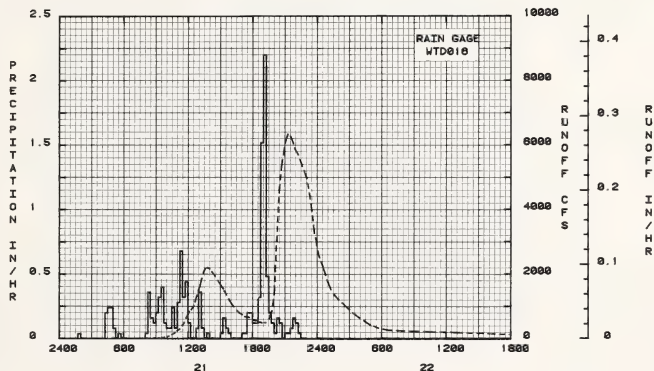
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.000-1 and 2.

1971 SELECTED RUNOFF EVENT							OXFORD, MISSISSIPPI		WATERSHED #12		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (Inches)	Runoff (Inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (Inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (Inches)	
EVENT OF FEBRUARY 21 - 23, 1971 (CONTINUED)											
2-21	1185				0.3200	1.08	2-21	1414	2065.682	0.1809	
	1200				0.4000	1.19		1432	1932.996	0.2070	
	1215				0.1200	1.22		1452	1736.998	0.2336	
	1230				0.0	1.22		1518	1526.997	0.2644	
	1245				0.0	1.22		1522	1470.261	0.2687	
	1300				0.0800	1.24		1534	1347.999	0.2810	
	1315				0.3600	1.33		1550	1180.000	0.2957	
	1330				0.0800	1.35		1616	976.000	0.3160	
	1345				0.0	1.35		1644	802.000	0.3340	
	1400				0.0400	1.36		1702	741.360	0.3441	
	1415				0.0007	1.36		1716	680.000	0.3513	
	1430				0.0007	1.36		1742	645.000	0.3638	
	1445				0.0007	1.36		1810	560.000	0.3760	
	1500				0.0	1.36		1820	550.000	0.3800	
	1515				0.0400	1.37		1838	504.687	0.3869	
	1530				0.1600	1.41		1852	484.797	0.3919	
	1545				0.0800	1.43		1908	494.632	0.3976	
	1600				0.0400	1.44		1914	499.638	0.3998	
	1615				0.0	1.44		1932	615.000	0.4071	
	1630				0.0	1.44		1948	856.000	0.4156	
	1645				0.0	1.44		1954	1060.000	0.4198	
	1700				0.0	1.44		2002	1844.372	0.4272	
	1715				0.0400	1.45		2008	2273.998	0.4354	
	1730				0.0400	1.46		2030	4629.984	0.4905	
	1745				0.2000	1.51		2042	5331.977	0.5338	
	1800				0.2000	1.56		2048	5547.969	0.5574	
	1815				0.1200	1.59		2054	5763.973	0.5820	
	1830				0.1200	1.62		2104	6114.984	0.6251	
	1845				0.3200	1.70		2118	6339.984	0.6883	
	1900				1.5200	2.08		2132	6276.973	0.7523	
	1915				2.2000	2.63		2148	6042.973	0.8237	
	1930				0.4800	2.75		2158	5862.977	0.8669	
	1945				0.2000	2.80		2216	5491.977	0.9423	
	2000				0.1200	2.83		2238	5340.977	1.0303	
	2015				0.0400	2.84		2304	4953.977	1.1273	
	2030				0.1600	2.88		2318	4476.977	1.1751	
	2045				0.1200	2.91		2332	3945.993	1.2179	
	2100				0.0	2.91		2346	3257.997	1.2545	
	2115				0.0400	2.92		2354	3081.997	1.2729	
	2130				0.0400	2.93		2400	2857.997	1.2858	
	2145				0.0800	2.95	2-22	14	2505.997	1.3130	
	2200				0.1600	2.99		32	2241.997	1.3440	
	2215				0.1200	3.02		48	1960.682	1.3684	
	2230				0.0400	3.03		102	1725.999	1.3871	
	2245				0.0	3.03		118	1505.837	1.4059	
	2300				0.0	3.03		138	1335.999	1.4265	
								200	1197.999	1.4467	
								228	1060.000	1.4696	
								300	892.000	1.4922	
								330	735.593	1.5099	
								358	625.000	1.5237	
								430	509.760	1.5369	
								456	412.187	1.5456	
								516	371.982	1.5513	
								542	315.000	1.5578	
								630	256.384	1.5678	
								724	234.000	1.5774	
								808	225.826	1.5847	
								842	217.752	1.5902	
								928	209.695	1.5973	
								1014	204.291	1.6042	
								1100	196.104	1.6109	
								1200	187.953	1.6183	
								1246	180.000	1.6254	
								1330	169.760	1.6310	
								1500	159.840	1.6418	
								1632	132.000	1.6515	
								1800	117.905	1.6595	
								2100	95.808	1.6734	
								2400	68.432	1.6841	
							2-23	356	46.269	1.6939	
								710	38.184	1.6998	
								1342	24.000	1.7086	
								1802	16.710	1.7124	
								2104	13.990	1.7144	

NOTES: To convert runoff in CFS to IBS/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.004-1 and 2.

1971 SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI WATERSHED W-12					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
30-Day	(inches)	(inches)	30-Day	of Day	(in/hr)	(inches)	30-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 21 - 23, 1971 (CONTINUED)											
							2400		11,590	1.7160	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent F and Q, see tables on pp. 62.004-1 and 2.



EVENT OF FEBRUARY 21 - 23, 1971  
OXFORD, MISSISSIPPI WATERSHED W-12

## OXFORD, MISSISSIPPI WATERSHED W-17

LOCATION: Marshall Co., Miss.; 7.8 mi. SW of Holy Springs on County road; Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 32100.00 acres 50.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-17											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	4.37	6.21	3.64	3.28	3.50	3.74	2.53	3.58	3.46	0.52	1.92	4.67	41.43												
Q	1.76	2.572	0.595	0.405	0.442	0.554	0.274	0.388	0.466	0.292	0.254	0.334	7.753												
STA AV P	3.76	4.84	4.79	4.96	4.24	3.25	3.90	3.96	4.26	2.39	4.15	5.27	49.76												
Q	1.054	1.473	1.480	1.182	0.807	0.414	0.447	0.514	0.482	0.296	0.663	1.129	9.939												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge														Maximum Volume for Selected Time Interval											
Date		Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days																
Date		Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	2-21	0.184	2-21	0.183	2-21	0.363	2-21	0.878	2-21	1.256	2-21	1.617	2-21	1.705	2-19	1.972									
MAXIMUMS FOR PERIOD OF RECORD																									
2-23		0.210	2-23	0.210	2-23	0.410	2-23	1.120	2-23	1.500	12-3	2.010	3-24	2.390	3-24	4.680									
1962			1962		1962		1962		1962		1964		1965		1965										

NOTES: Watershed conditions: About 18% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 48% in woods, good cover; 1% in bare gullies; 5% urban. Percentages of total area in various land use categories are based on the latest surveys completed 1970-73. About 19% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-5-5. Monthly precipitation Thiessen weighted from 21 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

1971 DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-17											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.59	0.0	0.25	0.0	0.0	0.10	0.0	0.0	0.0											
2	0.0	0.0	0.18	0.0	0.03	0.0	0.0	0.01	0.44	0.0	0.03	0.45											
3	0.25	0.11	0.06	0.0	0.0	0.0	0.0	0.08	0.00	0.0	0.0	0.49											
4	0.35	0.74	0.0	0.0	0.0	0.0	0.0	0.05	0.00	0.02	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.08	0.00	0.43	0.0	0.16											
6	0.0	0.0	0.33	0.0	0.0	0.09	0.07	0.45	0.01	0.0	0.37	0.23											
7	0.0	0.10	0.0	0.0	0.19	0.38	0.0	0.00	0.15	0.0	0.0	0.01											
8	0.0	0.09	0.0	0.0	0.00	0.09	0.0	0.00	0.02	0.0	0.0	0.0											
9	0.0	0.0	0.19	0.0	0.0	0.06	0.0	0.67	0.0	0.0	0.05	1.20											
10	0.0	0.0	0.20	0.0	0.26	0.0	0.0	0.09	0.0	0.0	0.0	0.03											
11	0.02	0.00	0.0	0.0	0.15	0.0	0.0	0.19	0.00	0.0	0.0	0.0											
12	0.0	1.08	0.0	0.0	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.41											
13	0.00	0.0	0.45	0.03	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.03											
14	0.58	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.35											
15	0.0	0.0	0.18	0.0	0.0	0.04	0.0	0.25	0.0	0.00	0.0	0.58											
16	0.0	0.0	0.0	0.0	0.0	1.86	0.0	0.01	0.71	0.0	0.0	0.04											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0											
18	0.0	0.0	0.46	0.11	0.0	0.71	0.0	0.00	0.0	0.0	0.72	0.0											
19	0.0	0.78	0.0	0.0	0.0	0.0	0.04	0.00	1.12	0.0	0.05	0.11											
20	0.0	0.0	0.0	1.08	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0											
21	0.30	2.80	0.0	0.30	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0											
22	1.18	0.0	0.01	0.11	0.0	0.0	0.0	0.30	0.0	0.0	0.02	0.0											
23	0.43	0.0	0.0	0.68	0.0	0.0	0.26	0.0	0.0	0.02	0.13	0.0											
24	1.18	0.0	0.0	0.0	0.89	0.0	1.45	0.0	0.0	0.05	0.0	0.0											
25	0.0	0.01	1.14	0.0	0.0	0.0	0.32	0.0	0.00	0.0	0.0	0.0											
26	0.0	0.50	0.0	0.0	0.0	0.0	0.03	1.31	0.84	0.0	0.0	0.0											
27	0.07	0.0	0.0	0.0	0.25	0.15	0.0	0.0	0.01	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.56	0.07											
29	0.0	0.05	0.21	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.02											
30	0.0	0.0	0.18	0.0	0.0	0.17	0.11	0.0	0.0	0.0	0.0	0.49											
31	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	4.37	6.21	3.64	3.28	3.50	3.74	2.53	3.58	3.46	0.52	1.92	4.67											
STA AV	3.76	4.84	4.79	4.96	4.24	3.25	3.90	3.96	4.26	2.39	4.15	5.27											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 4 thru 6, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												OXFORD, MISSISSIPPI				WATERSHED W-17			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
1	13.4	14.8	19.2	31.0	12.7	12.4	10.7	12.9	14.1	60.2	11.1	11.3							
2	13.4	14.8	21.0	33.8	12.7	12.2	10.7	12.9	14.3	11.1	11.1	11.8							
3	13.6	14.8	20.7	16.8	12.5	12.0	10.7	12.9	14.4	11.1	11.1	17.4							
4	12.7	61.7	16.6	18.3	11.8	12.0	10.7	12.9	13.1	11.1	11.1	12.7							
5	16.3	58.0	18.2	13.8	11.6	12.0	10.7	12.9	12.7	11.1	11.1	12.0							
6	14.3	19.1	33.7	13.8	11.3	10.5	10.7	13.3	12.4	11.1	11.1	11.6							
7	14.3	15.9	22.5	13.8	11.3	10.1	10.5	14.1	12.4	11.1	11.1	11.3							
8	14.3	15.3	18.3	13.8	11.8	9.1	10.3	12.9	12.4	11.1	11.1	11.1							
9	14.1	15.1	17.6	13.8	12.0	10.0	10.3	25.9	12.2	11.1	11.1	44.5							
10	13.8	15.3	25.2	13.8	13.4	8.9	10.7	14.5	11.8	11.1	11.1	15.1							
11	13.6	16.1	18.6	13.8	13.6	8.7	11.1	13.6	11.3	11.1	11.1	11.6							
12	13.4	349.9	17.0	13.8	85.6	8.7	11.1	13.9	10.5	11.1	11.1	14.6							
13	13.6	56.5	58.6	13.8	73.5	8.9	11.3	12.9	10.7	11.1	11.1	10.9							
14	20.3	22.2	19.5	13.8	16.8	8.9	11.6	12.9	10.7	11.1	11.1	12.0							
15	16.2	18.0	18.1	13.4	14.1	8.9	11.6	12.9	10.3	11.1	11.1	62.1							
16	13.6	15.9	15.1	12.9	12.9	362.3	11.6	12.9	10.5	11.1	11.1	11.8							
17	13.4	15.3	14.1	12.9	12.7	27.6	11.6	12.9	10.7	11.1	11.1	11.8							
18	13.1	15.3	15.7	12.9	13.1	55.4	11.6	12.9	10.3	11.1	11.1	11.6							
19	12.7	138.8	22.0	12.9	13.4	26.0	11.6	12.9	13.7	11.1	13.5	10.9							
20	12.7	42.8	15.6	14.4	13.4	12.5	11.6	12.9	18.3	11.1	12.0	10.7							
21	14.4	1557.9	14.6	62.3	13.4	10.7	11.6	12.9	11.8	11.1	11.6	10.7							
22	178.1	724.7	14.3	10.0	13.4	9.9	11.6	12.9	12.0	11.1	11.6	10.7							
23	78.4	56.8	14.3	66.2	13.6	10.1	13.0	12.9	12.0	11.1	11.6	10.7							
24	86.1	28.9	14.1	18.2	51.2	10.1	26.0	12.9	12.0	11.1	11.6	10.7							
25	53.9	23.6	167.3	13.9	38.2	9.9	14.4	12.2	11.8	11.1	11.6	10.7							
26	22.5	93.7	34.0	12.7	13.4	10.5	12.0	111.4	27.6	11.1	11.6	10.7							
27	16.7	27.1	20.0	12.4	12.9	12.5	12.0	22.4	13.1	11.1	11.3	10.7							
28	15.9	20.7	20.0	12.2	12.9	13.4	12.0	12.7	60.6	11.1	12.5	10.7							
29	15.9	41.6	12.2	12.7	12.0	12.0	12.2	110.1	11.1	12.7	11.3	10.7							
30	15.9	17.8	12.7	12.2	10.9	12.5	12.5	110.1	11.1	11.3	11.3	14.0							
31	15.3	15.3	15.3	12.2	12.2	12.2	12.9	12.4	11.1	11.1	11.1	13.1							
MEAN	51.15	123.90	25.89	18.22	19.23	24.90	11.94	16.88	20.95	12.70	11.43	14.34							
INCHES	1.176	2.572	0.595	0.405	0.442	0.554	0.274	0.388	0.466	0.292	0.254	0.358							
STA AV	1.054	1.473	1.480	1.182	0.807	0.414	0.447	0.514	0.482	0.296	0.663	1.129							

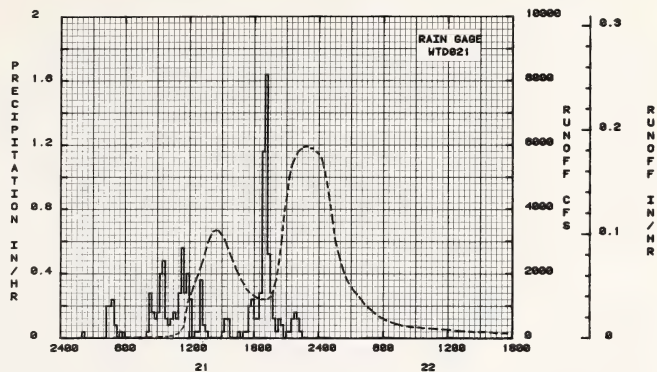
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0007415. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 15 yr (1957-71) record period.

1971 SELECTED RAINFALL EVENT						OXFORD, MISSISSIPPI			WATERSHED W-17		
ANTECEDENT CONDITIONS			RAINFALL			RUMOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 21 - 24, 1971											
RG WTD021											
2-21	0.0	0.004	2-21	145	0.0	0.0	2-21	502	24.814	0.0	
				200	0.0	0.0		602	28.313	0.0008	
				215	0.0400	0.01		728	29.232	0.0021	
				230	0.0004	0.01		830	28.313	0.0030	
				400	0.0	0.01		900	30.163	0.0035	
WATERSHED CONDITIONS:											
About 18% of area in cultivation, primarily cotton, corn, soybeans and ryegrass, poor to fair cover provided by residue from 1970; 20% in pasture and idle land, fair to good cover; 48% in woods, good cover; 1% in bare gullies; 5% urban.											
				415	0.0	0.01		928	32.050	0.0039	
				430	0.2000	0.06		950	46.792	0.0043	
				445	0.2000	0.11		1000	47.984	0.0045	
				500	0.2400	0.17		1014	62.375	0.0049	
				515	0.0800	0.19		1030	77.760	0.0055	
				530	0.0	0.19		1046	112.606	0.0063	
				545	0.0400	0.20		1102	153.553	0.0074	
				600	0.0	0.20		1116	245.938	0.0088	
				730	0.0	0.20		1130	351.135	0.0110	
				745	0.0003	0.20		1148	975.918	0.0171	
				800	0.0006	0.20		1152	1103.999	0.0192	
				815	0.0400	0.21		1158	1217.999	0.0228	
				830	0.2807	0.28		1216	1463.999	0.0352	
				845	0.1600	0.32		1234	1763.999	0.0502	
				900	0.1200	0.35		1250	1985.999	0.0656	
				915	0.1600	0.39		1304	2213.997	0.0807	
				930	0.4000	0.49		1318	2453.999	0.0975	
				945	0.4000	0.61		1336	2819.997	0.1219	
				1000	0.1200	0.64		1348	3041.998	0.1400	
				1015	0.0800	0.66		1402	3215.998	0.1626	
				1030	0.1200	0.69		1412	3311.997	0.1794	
				1045	0.1600	0.73		1428	3353.995	0.2069	
				1100	0.1200	0.76		1440	3335.995	0.2276	
				1115	0.2000	0.83		1502	3191.996	0.2446	
				1130	0.5600	0.97		1518	3017.997	0.2902	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000309. Thiessen weighted storm rainfall, rain pages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.005 -1 and 2.

1971 SELECTED RUNOFF EVENT									
OXFORD, MISSISSIPPI WATERSHED W-17									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF FEBRUARY 21 - 24, 1971 (CONTINUED)									
2-21	1145	0.2800	1.04	2-21	1534	2783.995	0.3141		
	1200	0.4000	1.14		1550	2555.996	0.3361		
	1215	0.2400	1.20		1608	2369.997	0.3539		
	1230	0.0	1.20		1618	2159.998	0.3702		
	1245	0.0400	1.21		1636	1950.000	0.3892		
	1300	0.0400	1.22		1650	1787.999	0.4027		
	1315	0.3600	1.31		1706	1655.999	0.4169		
	1330	0.0800	1.33		1718	1517.999	0.4267		
	1345	0.0400	1.34		1734	1421.999	0.4388		
	1400	0.0	1.34		1756	1320.000	0.4543		
	1415	0.0005	1.34		1818	1241.999	0.4688		
	1430	0.0005	1.34		1844	1200.000	0.4851		
	1445	0.0005	1.34		1902	1193.999	0.4962		
	1500	0.0	1.34		1918	1217.999	0.5061		
	1515	0.0400	1.35		1934	1283.999	0.5164		
	1530	0.1198	1.38		1944	1367.999	0.5232		
	1545	0.1200	1.41		1948	1463.999	0.5261		
	1600	0.0	1.41		2004	1835.999	0.5397		
	1615	0.0	1.41		2018	2303.995	0.5546		
	1630	0.0	1.41		2034	3041.998	0.5766		
	1645	0.0400	1.42		2046	3800.716	0.5977		
	1700	0.0	1.42		2104	4470.457	0.6360		
	1715	0.0400	1.43		2116	4997.242	0.6652		
	1730	0.0400	1.44		2122	5159.812	0.6809		
	1745	0.2000	1.49		2130	5345.609	0.7026		
	1800	0.2400	1.55		2146	5575.289	0.7476		
	1815	0.1200	1.58		2204	5788.336	0.8003		
	1830	0.1200	1.61		2224	5883.734	0.8604		
	1845	0.2800	1.68		2238	5940.695	0.9030		
	1900	1.1600	1.97		2300	5960.133	0.9704		
	1915	1.6400	2.38		2316	5889.984	1.0192		
	1930	0.5200	2.51		2328	5896.215	1.0556		
	1945	0.2800	2.58		2346	5762.793	1.1097		
	2000	0.1200	2.61		2400	5711.297	1.1511		
	2015	0.0400	2.62	2-22	16	5570.457	1.1976		
	2030	0.1200	2.65		30	5290.609	1.2368		
	2045	0.0800	2.67		46	4813.930	1.2784		
	2100	0.0	2.67		102	4269.998	1.3158		
	2115	0.0400	2.68		120	3545.998	1.3520		
	2130	0.0400	2.69		134	2993.998	1.3756		
	2145	0.1200	2.72		154	2567.996	1.4042		
	2200	0.1600	2.76		208	2255.997	1.4216		
	2215	0.1200	2.79		222	2033.996	1.4371		
	2230	0.0400	2.80		236	1830.000	1.4510		
	2245	0.0	2.80		250	1685.999	1.4637		
	2300	0.0	2.80		306	1547.999	1.4770		
					334	1343.999	1.4979		
					348	1265.999	1.5073		
					416	1043.638	1.5240		
					448	882.499	1.5399		
					518	750.500	1.5525		
					548	625.000	1.5631		
					618	537.000	1.5721		
					704	448.568	1.5838		
					748	372.895	1.5931		
					848	335.895	1.6040		
					950	306.163	1.6142		
					1104	272.312	1.6252		
					1216	243.352	1.6348		
					1332	202.056	1.6435		
					1426	190.063	1.6490		
					1530	183.000	1.6551		
					1634	153.553	1.6606		
					1732	143.168	1.6650		
					1856	126.112	1.6708		
					2036	118.000	1.6771		
					2236	105.974	1.6840		
					2320	104.336	1.6864		
					2400	97.568	1.6885		
				2-23	600	73.290	1.7043		
					1202	50.656	1.7159		
					1502	45.408	1.7204		
					1932	34.688	1.7260		
					2400	33.000	1.7307		
				2-24	2400	24.814	1.7521		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000309. Thiessen weighted storm rainfall, rain gauges 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.005 -1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-24

LOCATION: Marshall Co., Miss.; 2.2 mi. SW of Holly Springs on County road; Little Sand Ditch, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 512.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-24												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
P	4.32	6.58	3.91	3.61	3.65	4.24	2.84	1.99	3.83	0.46	1.59	4.92	42.35												
1971 Q	0.932	1.981	0.923	0.189	0.077	0.133	0.006	0.0	0.043	0.0	0.002	0.116	4.402												
STA AV P	3.78	4.95	4.07	4.96	4.31	3.20	3.90	3.64	4.14	2.38	4.15	5.26	49.55												
Q	1.075	1.499	1.375	1.352	0.597	0.143	0.181	0.293	0.228	0.125	0.499	1.026	8.394												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Barium	Barium Volume for Selected Time Interval																								
Discharge	6 Hours																								
Date	Date	1 Hour	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours	2 Hours													
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	2-21	0.693	2-21	0.437	2-21	0.576	2-21	0.730	2-21	0.987	2-21	1.203	2-21	1.293	2-21	1.668									
MAXIMUMS FOR PERIOD OF RECORD																									
2-23	1.040	2-23	0.900	2-23	1.360	2-23	1.640	2-23	1.860	3-28	2.390	1-30	3.160	3-24	5.320										
1962		1962		1962		1962		1962		1965		1957		1965											

NOTES: Watershed conditions: About 4% in cultivation (corn), fair cover November to March, poor cover April and May improving to good by mid-July; 13% in pasture and idle land, good cover April to October with fair cover remainder of year; 81% in woods, good cover; 1% in bare gullies; 1% clay pit. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 7% of drainage area above small desludging and retention dams. For map of watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.7-4. Monthly precipitation Thiessen weighted from rain gages 4 and 30. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

1971 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-24												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.65	0.0	0.22	0.0	0.0	0.03	0.0	0.0	0.0													
2	0.0	0.0	0.22	0.0	0.01	0.0	0.0	0.05	0.58	0.0	0.0	0.0													
3	0.22	0.11	0.11	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.52													
4	0.36	0.66	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.28	0.0	0.15													
6	0.0	0.0	0.39	0.0	0.0	0.28	0.08	0.43	0.0	0.0	0.36	0.21													
7	0.0	0.19	0.0	0.0	0.27	0.0	0.0	0.09	0.0	0.0	0.0	0.03													
8	0.0	0.18	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.19	0.0	0.0	0.0	0.00	0.19	0.0	0.0	0.04	1.31													
10	0.0	0.0	0.18	0.0	0.15	0.0	0.0	0.19	0.0	0.0	0.0	0.0													
11	0.04	0.0	0.0	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0													
12	0.0	1.13	0.0	0.0	1.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.48	0.04	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.43	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.32													
15	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66													
16	0.0	0.0	0.0	0.0	0.0	1.83	0.0	0.0	0.74	0.0	0.0	0.05													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.49	0.09	0.0	1.00	0.0	0.0	0.0	0.0	0.73	0.0													
19	0.0	0.84	0.0	0.0	0.0	0.0	0.07	0.0	1.22	0.0	0.06	0.12													
20	0.0	0.0	0.0	1.20	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0													
21	0.32	2.97	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	1.40	0.0	0.0	0.03	0.0	0.0	0.0	0.45	0.0	0.0	0.02	0.0													
23	0.48	0.0	0.0	0.86	0.0	0.0	0.63	0.0	0.0	0.16	0.0	0.0													
24	0.53	0.0	0.0	0.0	1.52	0.0	0.0	0.0	0.14	0.0	0.0	0.0													
25	0.0	0.0	1.16	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.47	1.12	0.0	0.0	0.0													
27	0.55	0.0	0.0	0.0	0.21	0.06	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.46	0.0	0.0	0.0	0.14	0.0	0.0	0.63	0.05	0.0													
29	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.18	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.50													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0													
TOTAL	4.32	6.58	3.91	3.61	3.65	4.24	2.84	1.99	3.83	0.46	1.59	4.92													
STA AV	3.78	4.95	4.07	4.96	4.31	3.20	3.90	3.64	4.14	2.38	4.15	5.26													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 4 and 30. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												OXFORD, MISSISSIPPI WATERSHED W-24	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	1.099	0.658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.845	0.775	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.768	0.509	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.254	
4	0.0	0.933	0.579	0.346	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.736	0.391	0.266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	1.059	0.164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	1.197	0.114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.320	0.923	0.114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.923	0.048	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.304	
10	0.0	0.0	0.845	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.079	0.697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	3.851	0.627	0.0	1.189	0.0	0.0	0.0	0.0	0.0	0.0	0.183	
13	0.0	0.115	0.627	0.0	0.185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.509	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.068	
15	0.0	0.0	0.311	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.685	
16	0.0	0.0	0.231	0.0	0.0	1.724	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.231	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.231	0.0	1.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.796	0.203	0.0	0.0	0.065	0.0	0.0	0.094	0.0	0.0	0.0	
20	0.0	0.203	0.153	0.088	0.0	0.0	0.0	0.157	0.0	0.0	0.0	0.0	
21	0.0	22.393	0.131	0.278	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	5.460	8.888	0.114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	1.934	1.479	0.048	0.697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	11.414	1.275	0.048	0.0	0.096	0.0	0.134	0.0	0.0	0.0	0.0	0.0	
25	0.992	1.099	2.194	0.0	0.151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.199	1.585	1.479	0.0	0.0	0.0	0.0	0.0	0.671	0.0	0.0	0.0	
27	0.048	1.591	0.951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	1.275	0.627	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.0	
29	0.0	0.627	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.627	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.563	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.6467	1.5221	0.6407	0.1353	0.0534	0.0951	0.0043	0.0	0.0307	0.0	0.0012	0.0805	
100% BCS	0.932	1.981	0.923	0.189	0.077	0.133	0.006	0.0	0.043	0.0	0.002	0.116	
STA AV	1.075	1.499	1.375	1.352	0.597	0.143	0.181	0.293	0.228	0.125	0.499	1.026	

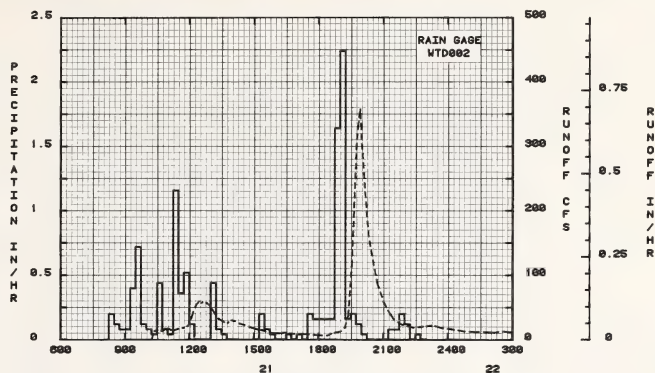
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.046488. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 15 yr (1957-71) record period.

1971 SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-24			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF FEBRUARY 21 - 23, 1971											
RG WTD002			RG WTD002								
2-21	0.15	0.003	2-21	815	0.0	0.0	2-21	1016	0.097	0.0	
				830	0.2000	0.05		1020	7.975	0.0005	
				845	0.1200	0.08		1024	13.533	0.0019	
				900	0.0800	0.10		1030	14.962	0.0047	
				915	0.0800	0.12		1046	12.620	0.0118	
WATERSHED CONDITIONS:											
About 4% of area in cultivation primarily corn, poor to fair cover provided by residue from 1970 crop; 13% in pasture and idle land, fair to good cover; 81% in woods, good cover; 1% in bare gullies; 1% in clay pit.											
				930	0.4000	0.22		1054	17.481	0.0157	
				945	0.7200	0.40		1100	17.481	0.0191	
				1000	0.1200	0.43		1110	14.962	0.0243	
				1015	0.0800	0.45		1118	14.476	0.0281	
				1030	0.0400	0.46		1130	16.971	0.0342	
				1045	0.4400	0.57		1142	18.497	0.0411	
				1100	0.0800	0.59		1146	18.497	0.0435	
				1115	0.0400	0.60		1156	20.952	0.0499	
				1130	1.1600	0.89		1202	25.136	0.0544	
				1145	0.3600	0.98		1212	43.336	0.0655	
				1200	0.5200	1.11		1220	53.900	0.0781	
				1215	0.1200	1.14		1228	59.438	0.0927	
				1230	0.0	1.14		1234	56.695	0.1040	
				1245	0.0	1.14		1238	56.068	0.1114	
				1300	0.0	1.14		1248	56.695	0.1299	
				1315	0.4400	1.25		1256	53.200	0.1441	
				1330	0.0800	1.27		1314	38.938	0.1709	
				1345	0.0400	1.28		1322	31.800	0.1800	
				1400	0.0	1.28		1338	26.938	0.1952	
				1515	0.0	1.28		1348	25.726	0.2037	
				1530	0.2000	1.33		1350	27.552	0.2054	
				1545	0.0800	1.35		1358	30.000	0.2128	
				1600	0.0400	1.36		1408	28.168	0.2222	
				1615	0.0	1.36		1422	24.559	0.2361	
				1630	0.0	1.36		1454	18.497	0.2563	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001937. Thiessen weighted storm rainfall, rain gages 4 and 30. For 30-day antecedent P and Q, see tables on pp. 62.007-1 and 2.

1971 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-24				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF FEBRUARY			21 - 23, 1971 (CONTINUED)							
2-21	1645	0.0400	1.37	2-21	1516	14.962	0.2682			
	1700	0.0	1.37		1522	14.962	0.2711			
	1715	0.0400	1.38		1534	12.173	0.2764			
	1730	0.0	1.38		1554	9.600	0.2834			
	1745	0.2000	1.43		1620	9.600	0.2915			
	1800	0.1600	1.47		1622	10.864	0.2922			
	1815	0.1600	1.51		1630	10.864	0.2950			
	1830	0.1600	1.55		1640	9.187	0.2982			
	1845	0.1600	1.59		1712	8.778	0.3075			
	1900	1.6400	2.00		1734	7.581	0.3133			
1915	2.2400	2.56	2.56	1758	6.810	0.3189				
	1930	0.1600		1826	6.063	0.3247				
	1945	0.2000		1836	9.187	0.3272				
	2000	0.1200		1846	10.864	0.3304				
	2015	0.0400		1904	13.074	0.3374				
2030	0.0	2.69	2.69	1914	18.497	0.3425				
	2045	0.0		1924	37.768	0.3516				
	2100	0.0		1934	122.995	0.3776				
	2115	0.0		1946	296.800	0.4589				
	2130	0.0800		1950	330.399	0.4994				
2145	0.0800	2.73	2.73	1956	357.719	0.5659				
	2200	0.2000		1958	333.600	0.5883				
	2215	0.1200		2006	257.800	0.6447				
	2230	0.0		2020	159.600	0.7591				
	2245	0.0400		2044	87.000	0.8546				
2300	0.0	2.82	2.82	2102	58.068	0.8968				
				2118	41.359	0.9225				
				2130	31.200	0.9366				
				2144	26.328	0.9496				
				2156	22.426	0.9590				
				2226	18.497	0.9788				
				2240	19.495	0.9874				
				2252	20.468	0.9951				
				2302	20.952	1.0018				
				2316	21.928	1.0115				
2-22				2326	20.952	1.0184				
				2348	17.481	1.0320				
				2400	16.971	1.0387				
				18	15.456	1.0481				
				48	12.620	1.0617				
				128	11.731	1.0774				
				204	11.295	1.0908				
				210	10.864	1.0929				
				222	12.173	1.0974				
				234	12.620	1.1022				
				308	11.295	1.1153				
				400	8.778	1.1321				
				506	8.374	1.1504				
				558	6.434	1.1628				
				726	5.339	1.1795				
				910	4.270	1.1956				
				1042	3.268	1.2068				
				1244	2.671	1.2185				
				1638	2.400	1.2377				
				2014	1.908	1.2527				
2-23				2400	1.683	1.2658				
				2400	1.275	1.3346				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001937. Thiessen weighted storm rainfall, rain gages 4 and 30. For 30-day antecedent P and Q, see tables on pp. 62.007-1 and 2.



EVENT OF FEBRUARY 21 - 23, 1971  
 OXFORD, MISSISSIPPI WATERSHED W-24

## OXFORD, MISSISSIPPI WATERSHED W-28

LOCATION: Marshall Co., Miss.; 2.3 mi. SW of Holly Springs on State Highway No. 7; Walkers Bottom Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1080.00 acres 1.69 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						OXFORD, MISSISSIPPI				WATERSHED W-28						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971	P 4.28	7.07	3.66	3.37	3.79	2.89	2.93	2.36	2.59	0.59	0.65	4.53	39.69			
	Q 0.262	2.250	0.162	0.016	0.011	0.006	0.000	0.0	0.0	0.0	1.0	0.003	2.709			
STA AV	P 3.71	4.86	4.72	4.79	4.12	3.26	3.82	3.67	4.32	2.52	4.12	5.23	49.14			
	Q 0.339	0.636	0.497	0.349	0.158	0.056	0.108	0.214	0.189	0.091	0.188	0.378	3.203			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		Maximum Volume for Selected Time Interval														
Date Date		1 Hour	2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days			
Date Date		Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.			
1971	2-21	0.875	2-21	0.628	2-21	0.907	2-21	1.483	2-21	1.674	2-21	1.870	2-21	1.970	2-19	2.112
MAXIMUMS FOR PERIOD OF RECORD																
2-21		0.875	2-21	0.628	2-21	0.907	2-21	1.483	2-21	1.674	2-21	1.870	1-30	2.020	1-27	2.680
1971			1971		1971		1971		1971		1971		1957		1957	

NOTES: Watershed conditions: About 9% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 61% in woods, good cover; 2% in bare uplands. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 58% of drainage area above small deslitting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-6-5. Monthly precipitation Thiessen weighted from rain gages 5, 6 and 7. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, MS, Mississippi.

1971 DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-28	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.60	0.0	0.19	0.0	0.0	0.05	0.0	0.0	0.0
2	0.0	0.0	0.0	0.17	0.0	0.04	0.0	0.0	0.19	0.0	0.05	0.43	
3	0.23	0.11	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.47	
4	0.39	0.72	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.05	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.46	0.0	0.16	
6	0.0	0.0	0.30	0.0	0.0	0.13	0.21	0.11	0.0	0.0	0.33	0.23	
7	0.0	0.10	0.0	0.0	0.19	0.40	0.0	0.0	0.00	0.0	0.0	0.02	
8	0.0	0.10	0.0	0.0	0.0	0.42	0.0	0.05	0.01	0.0	0.0	0.0	
9	0.0	0.0	0.19	0.0	0.0	0.03	0.46	0.0	0.0	0.0	0.05	1.15	
10	0.0	0.0	0.20	0.0	0.33	0.0	0.0	0.82	0.0	0.0	0.0	0.08	
11	0.02	0.0	0.0	0.0	0.20	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
12	0.0	1.05	0.0	0.0	1.72	0.0	0.0	0.0	0.0	0.0	0.0	0.36	
13	0.01	0.0	0.55	0.00	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
14	0.74	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.42	
15	0.0	0.0	0.16	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.50	
16	0.0	0.0	0.0	0.0	0.0	1.33	0.0	0.0	0.70	0.0	0.0	0.04	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.45	0.02	0.0	0.25	0.0	0.01	0.0	0.0	0.50	0.0	
19	0.0	0.66	0.0	0.0	0.0	0.0	0.03	0.01	1.08	0.0	0.04	0.11	
20	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	
21	0.28	3.80	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.96	0.0	0.0	0.62	0.0	0.0	0.0	0.17	0.0	0.0	0.02	0.0	
23	0.39	0.0	0.0	0.99	0.0	0.0	0.07	0.0	0.0	0.05	0.13	0.05	
24	1.27	0.0	0.0	0.0	0.99	0.0	1.84	0.0	0.0	0.03	0.0	0.0	
25	0.0	0.02	1.15	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.49	0.0	0.0	0.0	0.0	0.06	0.40	0.50	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.25	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.39	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.33	0.05	
29	0.0	0.05	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
30	0.0	0.0	0.20	0.0	0.0	0.0	0.19	0.04	0.0	0.0	0.0	0.43	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	
TOTAL	4.28	7.07	3.66	3.37	3.79	2.89	2.93	2.36	2.59	0.59	1.65	4.53	
STA AV	3.71	4.86	4.72	4.79	4.12	3.26	3.82	3.67	4.32	2.52	4.12	5.23	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 5, 6 and 7. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													OXFORD, MISSISSIPPI WATERSHED W-28	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.683	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.586	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.331	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.194	0.270	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.032	0.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.0	0.149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.009	0.169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	2.492	0.107	0.0	0.188	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.468	0.513	0.0	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.300	0.152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.300	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.115		
16	0.0	0.300	0.115	0.0	0.0	0.251	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.300	0.132	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.300	0.149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	1.239	0.149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.362	0.149	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	69.931	0.149	0.192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	18.926	0.107	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	2.472	0.032	0.463	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	10.404	1.235	0.0	0.0	0.272	0.0	0.005	0.0	0.0	0.0	0.0	0.0		
25	0.846	0.848	1.705	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.169	0.848	0.741	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.132	0.848	0.214	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.115	0.683	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.3840	3.6461	0.2366	0.0240	0.0161	0.0088	0.0002	0.0	0.0	0.0	0.0	0.0037		
INCHES	0.262	2.250	0.162	0.016	0.011	0.006	0.000	0.0	0.0	0.0	0.0	0.003		
STA AV	0.339	0.636	0.497	0.349	0.158	0.056	0.108	0.214	0.189	0.091	0.188	0.378		

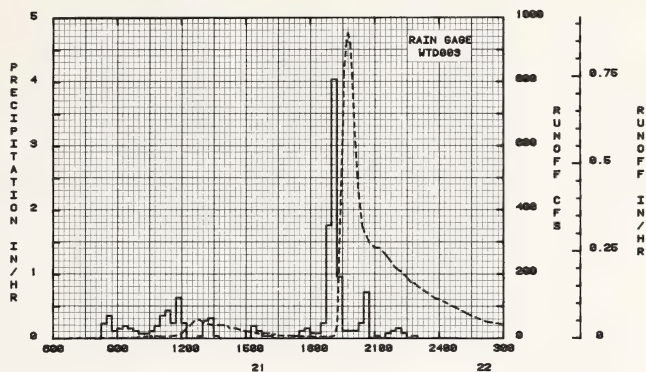
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0220387. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 15 yr (1957-71) record period.

1971 SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI		WATERSHED W-28		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 21 - 25, 1971										
2-21	RG WTD003	0.002	2-21	RG WTD003	0.0	0.0	2-21	600	0.967	0.0
	0.26			800	0.0	0.0		618	0.967	0.0003
				815	0.0	0.0		638	0.967	0.0006
				830	0.2390	0.06		654	2.783	0.0011
				845	0.3600	0.15		746	1.503	0.0028
WATERSHED CONDITIONS:										
About 9% of area in cultivation, primarily cotton, soybeans and corn, poor to fair cover provided by residue from 1970 crop; 28% in pasture and idle land; fair to good cover; 61% in woods, good cover; 2% in bare gullies.										
				900	0.1200	0.18		756	2.213	0.0031
				915	0.1600	0.22		854	1.503	0.0047
				930	0.2000	0.27		918	2.213	0.0054
				945	0.1600	0.31		928	2.783	0.0058
				1000	0.1200	0.34		948	2.783	0.0067
				1015	0.0800	0.36		1002	4.200	0.0074
				1030	0.0800	0.38		1018	5.070	0.0085
				1045	0.1200	0.41		1026	7.109	0.0092
				1100	0.2000	0.46		1034	7.109	0.0101
				1115	0.3600	0.55		1038	5.547	0.0105
				1130	0.4400	0.66		1046	7.109	0.0113
				1145	0.2400	0.72		1104	6.047	0.0131
				1200	0.6400	0.88		1108	5.547	0.0135
				1215	0.2400	0.94		1114	6.569	0.0141
				1230	0.0	0.94		1130	7.109	0.0158
				1245	0.0	0.94		1146	9.992	0.0179
				1300	0.0400	0.95		1200	16.000	0.0207
				1315	0.2796	1.02		1214	30.808	0.0257
				1330	0.3200	1.10		1232	49.472	0.0368
				1345	0.0800	1.11		1236	54.464	0.0400
				1500	0.0	1.11		1248	60.000	0.0505
				1515	0.0	1.11		1302	49.472	0.0622
				1530	0.2000	1.16		1316	44.504	0.0723
				1545	0.1200	1.19		1328	42.032	0.0802
				1600	0.0400	1.20		1358	42.032	0.0955

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0009163. Thiessen weighted storm rainfall, rain gages 5, 6 and 7. For 30-day antecedent P and Q, see tables on pp. 68, 008-1 and 2.

1971 SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-28			
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 21 - 25, 1971 (CONTINUED)											
2-21	1615	0.0400	1.21	2-21	1410	37.256	0.1068				
	1630	0.0	1.21		1414	32.856	0.1089				
	1645	0.0	1.21		1430	32.856	0.1170				
	1700	0.0	1.21		1456	23.058	0.1281				
	1715	0.0	1.21		1518	21.213	0.1382				
	1730	0.0400	1.22		1528	16.798	0.1383				
	1745	0.1200	1.25		1536	15.236	0.1403				
	1800	0.1600	1.29		1606	15.236	0.1473				
	1815	0.0800	1.31		1614	11.824	0.1490				
	1830	0.0800	1.33		1622	13.120	0.1505				
	1845	0.2400	1.39		1632	8.813	0.1522				
	1900	1.7600	1.83		1714	7.665	0.1575				
	1915	4.0400	2.84		1758	5.070	0.1618				
	1930	0.9600	3.08		1816	4.621	0.1631				
	1945	0.1200	3.11		1840	5.547	0.1650				
	2000	0.1200	3.14		1846	4.200	0.1654				
	2015	0.1200	3.17		1856	5.547	0.1661				
	2030	0.2400	3.23		1908	8.238	0.1678				
	2045	0.7200	3.41		1916	39.608	0.1703				
	2100	0.0	3.41		1920	206.200	0.1778				
	2115	0.0400	3.42		1928	513.000	0.2218				
	2130	0.0	3.42		1932	663.000	0.2578				
	2145	0.0800	3.44		1934	826.000	0.2806				
	2200	0.1200	3.47		1942	930.000	0.3877				
	2215	0.1600	3.51		1946	952.500	0.4453				
	2230	0.0800	3.53		1952	917.500	0.5310				
	2245	0.0	3.53		1958	807.500	0.6103				
	2300	0.0400	3.54		2006	609.000	0.6970				
					2012	513.000	0.7486				
					2016	449.000	0.7780				
					2026	347.000	0.8389				
					2032	330.950	0.8701				
					2046	298.000	0.9375				
					2100	282.698	0.9997				
					2114	281.000	1.0600				
					2130	262.300	1.1266				
					2146	238.500	1.1879				
					2158	219.800	1.2300				
					2214	207.900	1.2824				
					2228	192.600	1.3253				
					2242	173.900	1.3646				
					2250	172.200	1.3858				
					2306	156.900	1.4261				
					2330	139.900	1.4806				
					2348	124.600	1.5170				
					2400	121.200	1.5396				
					2-22	42	97.400	1.6099			
					130	70.000	1.6718				
					214	50.700	1.7120				
					254	43.263	1.7408				
					318	40.813	1.7562				
					326	47.000	1.7616				
					334	40.813	1.7670				
					346	37.256	1.7782				
					404	31.821	1.7837				
					410	35.000	1.7868				
					422	27.863	1.7926				
					438	23.058	1.7988				
					448	25.950	1.8025				
					510	20.287	1.8103				
					540	20.287	1.8196				
					610	16.798	1.8281				
					620	18.492	1.8308				
					716	13.120	1.8443				
					828	11.824	1.8695				
					1504	6.569	1.9168				
					1912	5.070	1.9389				
					2140	3.808	1.9490				
					2400	3.442	1.9568				
					2400	1.503	2.0113				
					2-23	2400	0.967	2.0385			
					2-24	2400	0.730	2.0572			
					2-25	2400	0.730	2.0572			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0009183. Thiessen weighted storm rainfall, rain gages 5, 6 and 7. For 30-day antecedent P and Q, see tables on pp. 68,008-1 and 2.



EVENT OF FEBRUARY 21 - 25, 1971  
 OXFORD, MISSISSIPPI WATERSHED W-28

## OXFORD, MISSISSIPPI WATERSHED W-32

LOCATION: Marshall Co., Miss.; 4.6 mi. E of Walhill on County road; Cuffawa Creek, Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 20000.00 acres 31.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												OXFORD, MISSISSIPPI WATERSHED W-32			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1971 P	4.34	5.90	3.83	3.11	3.15	4.24	2.56	6.99	3.09	0.59	1.98	5.02	44.80		
Q	1.458	2.527	0.340	0.058	0.169	0.504	0.000	0.939	0.001	0.000	0.000	0.064	6.060		
STA AV P	3.81	4.89	4.91	4.98	4.58	3.19	3.86	3.90	4.49	2.43	4.26	5.37	50.66		
Q	1.162	1.739	1.752	1.352	0.987	0.221	0.315	0.393	0.441	0.133	0.646	1.363	10.522		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971 8-26	0.261	8-26	0.245	8-26	0.420	1-24	0.718	2-21	1.241	2-21	1.626	2-20	1.649	2-19	1.526
MAXIMUMS FOR PERIOD OF RECORD															
2-23 1962	0.570	2-23 1962	0.560	7-9 1967	0.960	12-3 1964	1.940	12-3 1964	2.450	12-3 1964	3.480	12-3 1964	3.720	3-24 1965	6.130

NOTES: Watershed conditions: About 27% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 32% in pasture and idle land, good cover April to October with fair cover remainder of year; 40% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on surveys made from 1971 to 1972. About 23% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Representative Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 948, p. 62-10-5. Monthly precipitation thickness weighted from 10 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

1971 DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-32			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.62	0.0	0.45	0.0	0.0	0.12	0.0	0.0	0.0		
2	0.0	0.0	0.19	0.0	0.01	0.0	0.0	0.0	0.27	0.0	0.0	0.02	0.51		
3	0.29	0.11	0.06	0.0	0.0	0.0	0.0	0.09	0.05	0.0	0.0	0.0	0.51		
4	0.33	0.75	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.02	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.01	0.50	0.0	0.0	0.18		
6	0.0	0.0	0.33	0.0	0.0	0.01	0.13	1.41	0.0	0.0	0.40	0.24			
7	0.0	0.09	0.0	0.0	0.21	0.88	0.0	0.09	0.01	0.0	0.0	0.01			
8	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0			
9	0.0	0.24	0.0	0.0	0.0	0.0	0.09	1.25	0.0	0.0	0.0	0.06	1.18		
10	0.0	0.0	0.21	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.03			
11	0.02	0.01	0.0	0.0	0.12	0.0	0.0	0.29	0.0	0.0	0.0	0.0			
12	0.0	1.13	0.0	0.0	1.72	0.0	0.0	0.0	0.0	0.0	0.0	0.45			
13	0.00	0.0	0.41	0.03	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.04			
14	0.52	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.42			
15	0.0	0.0	0.21	0.0	0.0	0.11	0.0	0.0	0.0	0.00	0.0	0.53			
16	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.01	0.72	0.0	0.0	0.03			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.52	0.18	0.0	1.47	0.0	0.0	0.0	0.0	0.72	0.0			
19	0.0	0.79	0.0	0.0	0.0	0.0	0.03	0.0	1.16	0.0	0.06	0.10			
20	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0			
21	0.27	2.29	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	1.01	0.07	0.16	0.16	0.3	0.16	0.0	0.23	0.0	0.0	0.04	0.0			
23	0.42	0.0	0.0	0.44	0.0	0.0	0.18	0.0	0.0	0.06	0.11	0.0			
24	1.48	0.0	0.0	0.0	0.40	0.0	1.29	0.0	0.0	0.00	0.0	0.0			
25	0.0	0.03	1.16	0.0	0.0	0.0	0.49	0.06	0.01	0.0	0.0	0.0			
26	0.0	0.62	0.0	0.0	0.0	0.0	0.01	2.78	0.65	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.35	0.16	0.0	0.04	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.40	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.57	0.15		
29	0.0	0.03	0.21	0.0	0.06	0.06	0.0	0.0	0.0	0.0	0.0	0.01			
30	0.0	0.0	0.18	0.0	0.0	0.15	0.12	0.0	0.0	0.0	0.0	0.63			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0			
TOTAL	4.34	5.90	3.83	3.11	3.15	4.24	2.56	6.99	3.09	0.59	1.98	5.02			
STA AV	3.81	4.89	4.91	4.98	4.58	3.19	3.86	3.90	4.49	2.43	4.26	5.37			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values thickness weighted from rain gages 3, 10 thru 14, 20, 21, 24 and 26. STA AV based on 15 yr (1957-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													OXFORD, MISSISSIPPI WATERSHED #32	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.6	0.2	0.3	5.5	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0		
2	0.5	0.2	0.1	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.5	0.3	0.1	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4		
4	1.8	31.4	0.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.5	29.6	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0		
6	0.3	6.4	0.7	0.1	0.0	0.0	0.0	176.9	0.0	0.0	0.0	0.0		
7	0.3	2.9	0.9	0.0	0.0	14.8	0.0	29.6	0.0	0.0	0.0	0.0		
8	0.3	1.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0		
9	0.3	1.0	0.0	0.0	0.0	0.0	0.0	30.5	0.0	0.0	0.0	17.0		
10	0.3	0.8	1.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.6		
11	0.3	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.3	383.3	0.1	0.0	58.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3		
13	0.2	21.7	12.6	0.0	44.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	1.3	5.8	1.4	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6		
15	4.3	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5		
16	3.4	0.1	0.2	0.0	0.1	47.9	0.0	0.0	0.0	0.0	0.0	0.7		
17	2.1	0.2	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.9	0.2	0.0	0.0	0.0	326.1	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.6	129.0	0.2	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.5	14.1	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.3	1126.5	0.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	109.9	261.2	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	100.5	3.9	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	948.7	0.1	0.0	3.7	10.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0		
25	25.0	0.1	227.7	0.2	19.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
26	11.1	75.0	20.1	0.0	3.0	0.0	0.0	521.8	0.0	0.0	0.0	0.0		
27	4.6	5.9	5.9	0.0	0.0	0.0	0.0	25.6	0.1	0.0	0.0	0.0		
28	2.5	1.4	2.4	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0		
29	1.7	0.8	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.9	3.5	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.2		
31	0.4	1.1	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.2		
MEAN	39.514	75.841	9.218	1.631	4.580	14.103	0.009	25.466	0.016	0.002	0.002	1.727		
INCHES	1.458	2.527	0.340	0.058	0.169	0.504	0.000	0.939	0.001	0.000	0.000	0.068		
STA AV	1.162	1.739	1.752	1.352	0.987	0.221	0.315	0.393	0.441	0.133	0.046	1.383		

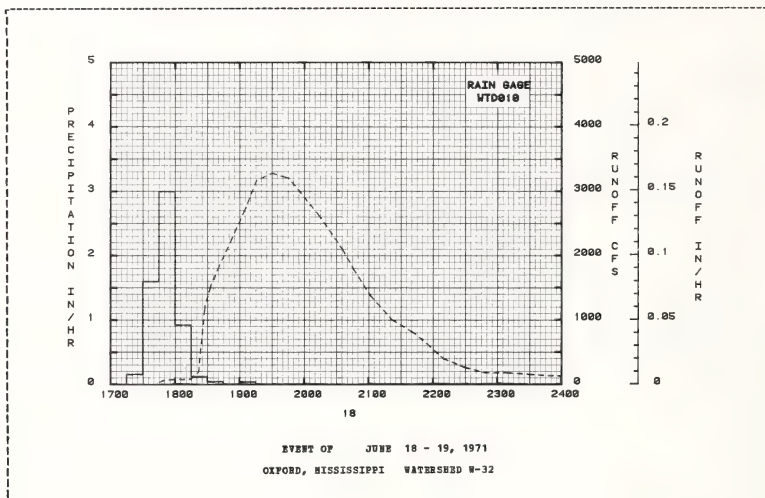
NOTES: To convert discharge in CFS to M<sup>3</sup>/DAY, multiply by 0.001981. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 15 yr (1957-71) record period.

1971 SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI WATERSHED #32					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JUNE 18 - 19, 1971											
RG WTD010			RG WTD010								
6-18	0.0	0.000	6-18	1715	0.0	0.0	6-18	1744	22.188	0.0	
				1730	0.1600	0.04		1750	69.210	0.0002	
				1745	1.6000	0.44		1800	78.312	0.0008	
				1800	3.0000	1.19		1814	80.188	0.0017	
				1815	0.9200	1.42		1822	187.000	0.0026	
WATERSHED CONDITIONS:											
About 27% of area in cultivation, primarily cotton, corn and soybeans, and ryegrass; 32% in pasture and idle land, fair to good cover; 40% in woods, good cover; 1% in bare gullies.											

NOTES: To convert runoff in CFS to M<sup>3</sup>/HR, multiply by 0.000496. Thiessen weighted storm rainfall, rain gages 3, 10 thru 18, 20, 21, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.010-1 and 2.

1971 SELECTED RUNOFF EVENT									
OXFORD, MISSISSIPPI WATERSHED W-32									
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF JUNE 18 - 19, 1971 (CONTINUED)									
							6-19	830	23.088
								644	18.250
								1212	3.378
								1718	1.601
								2310	1.254
								2400	0.407
									0.4070

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000496. Thiessen weighted storm rainfall, rain gages 3, 10 thru 18, 20, 21, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.010-1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-34

LOCATION: Marshall Co., Miss.; 8 mi. S of Byhalia on County road; Pigeon Roost Creek, Yazoo River Basin.

AREA: 75000.00 acres 117.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						OXFORD, MISSISSIPPI WATERSHED W-34										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971 P	4.41	6.10	3.66	3.19	3.57	3.61	2.63	4.61	3.13	0.85	1.92	4.60	41.89			
Q	1.714	3.480	1.160	0.686	0.727	0.771	0.493	0.877	0.498	0.429	0.514	0.632	11.942			
STA AV P	3.95	4.86	4.71	4.86	4.24	3.03	3.96	4.16	4.49	2.06	4.22	5.41	49.94			
Q	1.476	1.984	1.877	1.517	1.111	0.493	0.698	0.732	0.760	0.435	0.938	1.515	13.537			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge				Maximum Volume for Selected Time Interval												
Date	Rate	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days								
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1971	2-21	0.166	2-21	0.162	2-21	0.310	2-21	0.755	2-21	1.288	2-21	1.811	2-21	1.937	2-19	2.324
MAXIMUMS FOR PERIOD OF RECORD																
	2-21	0.166	2-21	0.162	2-21	0.310	7-9	0.800	7-9	1.410	11-27	2.270	12-3	2.720	3-24	4.770
1971			1971		1971		1967		1967		1968		1964		1965	

## MAXIMUMS FOR PERIOD OF RECORD

NOTES: Watershed conditions: About 23% in cultivation (cotton, corn and soybeans), fair cover November to March, poor cover April and May improving to good by mid-July; 25% in pasture and idle land, good cover April to October. With fair cover remainder of year; 46% in woods, good cover; 1% in bare gullies; 1% urban. Percentages of total area in various land use categories are based on surveys made from 1965 to 1971. About 17% of area, principally in upper reaches above small deslitting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-11-4. Monthly precipitation Thiessen weighted from 32 rain gages. Monthly values of runoff include small amounts of flow through auxiliary Station 34-A. Precipitation and runoff records began Jan. 1957. Runoff for period October 1969 thru December 1970 discontinued, due to dredging in the channel. For long-time precipitation records, see National Weather Service records at Holly Springs, MS, Mississippi.

DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-34	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.65	0.0	0.34	0.0	0.0	0.08	0.0	0.0	0.0		
2	0.0	0.0	0.19	0.0	0.03	0.0	0.0	0.00	0.31	0.0	0.02	0.46		
3	0.31	0.11	0.06	0.0	0.0	0.0	0.0	0.05	0.13	0.0	0.0	0.49		
4	0.33	0.74	0.0	0.0	0.0	0.0	0.0	0.08	0.00	0.01	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.12	0.01	0.37	0.0	0.17		
6	0.0	0.0	0.32	0.0	0.0	0.05	0.14	0.79	0.01	0.0	0.37	0.24		
7	0.0	0.0	0.0	0.0	0.22	0.43	0.0	0.08	0.08	0.0	0.0	0.01		
8	0.0	0.08	0.0	0.0	0.01	0.08	0.0	0.00	0.03	0.0	0.0	0.0		
9	0.0	0.0	0.20	0.0	0.0	0.0	0.09	0.76	0.0	0.0	0.05	1.13		
10	0.0	0.0	0.20	0.0	0.39	0.0	0.0	0.05	0.0	0.0	0.0	0.04		
11	0.02	0.00	0.0	0.0	0.13	0.0	0.0	0.24	0.00	0.0	0.0	0.0		
12	0.0	1.09	0.0	0.0	1.72	0.0	0.0	0.0	0.0	0.0	0.0	0.34		
13	0.00	0.0	0.41	0.03	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
14	0.52	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.41		
15	0.0	0.0	0.19	0.0	0.0	0.13	0.0	0.0	0.0	0.01	0.0	0.55		
16	0.0	0.0	0.0	0.0	0.0	1.28	0.0	0.01	0.61	0.0	0.0	0.04		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0		
18	0.0	0.0	0.50	0.12	0.0	1.06	0.0	0.01	0.0	0.0	0.74	0.0		
19	0.0	0.83	0.0	0.0	0.0	0.0	0.03	0.00	1.16	0.0	0.06	0.10		
20	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
21	0.28	2.63	0.0	0.26	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0		
22	1.26	0.0	0.02	0.15	0.0	0.0	0.0	0.32	0.0	0.0	0.03	0.0		
23	0.47	0.0	0.0	0.60	0.0	0.0	0.31	0.0	0.0	0.03	0.12	0.0		
24	1.10	0.0	0.0	0.0	0.0	0.0	1.39	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.01	1.11	0.0	0.0	0.0	0.32	0.02	0.00	0.0	0.0	0.0		
26	0.0	0.53	0.0	0.0	0.0	0.0	0.02	1.73	0.64	0.0	0.0	0.0		
27	0.03	0.0	0.0	0.0	0.28	0.12	0.0	0.0	0.02	0.0	0.0	0.0		
28	0.0	0.0	0.40	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.52	0.09		
29	0.0	0.05	0.19	0.0	0.03	0.07	0.0	0.0	0.0	0.0	0.0	0.01		
30	0.0	0.0	0.0	0.16	0.0	0.0	0.15	0.12	0.0	0.0	0.0	0.50		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0		
TOTAL	4.41	6.10	3.66	3.19	3.57	3.61	2.63	4.61	3.13	0.85	1.92	4.60		
STA AV	3.95	4.86	4.71	4.86	4.24	3.03	3.96	4.16	4.49	2.06	4.22	5.41		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-34, (p. 62-00-11). Daily precipitation values Thiessen weighted from rain gages 1 thru 31 and 33. STA AV based on 14 yr (1957-69, 1971) record period.

1971 MEAN DAILY DISCHARGE (cfs)													OXFORD, MISSISSIPPI WATERSHED W-34	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	63.6	63.6	197.3	41.1	46.9	55.1	42.2	61.6	38.9	46.9	52.0		
2	0.0	61.9	63.6	242.5	41.1	46.9	61.9	48.6	45.8	38.9	50.7	66.6		
3	0.0	60.0	65.4	62.3	42.2	41.1	63.6	47.5	66.1	40.0	53.5	100.9		
4	0.0	163.5	60.2	56.7	43.4	40.0	55.5	46.0	49.4	40.0	53.5	62.1		
5	0.0	366.7	53.5	47.1	44.5		52.2	48.4	48.1	41.1	53.5	55.0		
6	0.0	131.0	119.4	42.2	44.5	42.2	56.6	81.8	43.4	41.1	55.0	55.0		
7	0.0	121.5	97.7	45.8	45.5	46.3	55.1	341.8	42.2	42.2	55.0	55.0		
8	0.0	125.3	67.5	42.3	44.5	48.1	53.5	40.7	45.6	42.2	55.0	52.2		
9	0.0	127.2	67.5	42.3	45.6	45.6	55.0	122.9	49.4	40.0	55.0	115.5		
10	0.0	137.0	137.8	45.8	78.9	44.5	48.6	70.6	48.2	41.1	53.5	82.5		
11	0.0	138.6	77.9	42.2	66.2	48.2	41.1	43.4	46.9	42.2	52.0	44.5		
12	0.0	1269.9	67.5	42.2	317.5	50.7	41.1	42.2	50.7	44.5	52.0	45.6		
13	0.0	285.6	262.7	42.2	361.4	49.3	41.1	42.2	45.6	45.6	55.1	52.5		
14	130.7	116.3	109.7	42.2	58.7	46.9	40.0	41.1	50.7	43.4	56.6	65.1		
15	148.1	90.7	143.6	42.2	44.5	44.5	41.1	41.1	50.7	43.4	56.6	165.2		
16	65.7	65.7	72.5	41.1	44.5	494.7	41.1	40.0	53.5	45.5	56.6	58.2		
17	58.3	56.6	53.5	40.0	53.1	106.6	38.9	40.0	55.0	44.5	55.0	48.1		
18	56.6	62.1	79.0	42.2	63.6	463.0	38.9	45.6	42.2	56.6	56.6	48.1		
19	53.5	279.5	183.7	43.4	63.6	156.1	42.2	45.6	76.1	46.8	56.6	50.7		
20	52.0	265.9	85.3	50.3	58.4	48.1	44.5	45.6	120.8	48.1	55.0	52.0		
21	66.6	396.7	61.8	193.0	50.9	44.5	42.2	44.5	42.2	48.1	55.0	49.4		
22	815.3	2111.2	61.8	50.9	46.8	42.2	37.7	53.9	42.2	44.5	55.0	49.4		
23	616.5	194.8	58.4	216.3	48.1	42.2	55.9	49.7	44.5	42.2	55.0	52.0		
24	2670.9	96.4	60.2	68.6	93.3	43.4	121.7	43.4	49.4	42.2	52.2	55.1		
25	247.2	91.1	880.5	44.5	181.0	48.2	76.1	41.1	42.4	43.4	52.2	58.3		
26	111.0	354.1	179.5	41.1	46.8	46.0	38.9	697.1	57.9	48.2	55.0	56.6		
27	71.2	98.9	49.7	43.4	50.9	44.6	40.0	279.1	58.4	49.4	53.5	58.4		
28	63.8	69.3	46.1	42.3	47.5	49.3	41.1	56.9	40.0	44.5	52.0	61.8		
29	59.3	214.4	43.5	41.1	48.1	41.1	40.5	52.0	40.0	45.5	53.5	55.5		
30	56.6		66.0	45.8	41.1	49.4	43.4	62.6	40.0	45.6	53.5	79.2		
31	58.4		44.5		42.2		41.1	68.3		44.5		79.2		
MEAN	174.21	391.61	117.89	67.86	73.92	80.99	50.12	89.15	52.33	43.59	54.03	64.25		
INCHES	1.714	3.480	1.160	0.646	0.727	0.771	0.493	0.877	0.498	0.429	0.514	0.632		
STA AV	1.476	1.984	1.877	1.517	1.111	0.493	0.698	0.732	0.760	0.435	0.538	1.515		

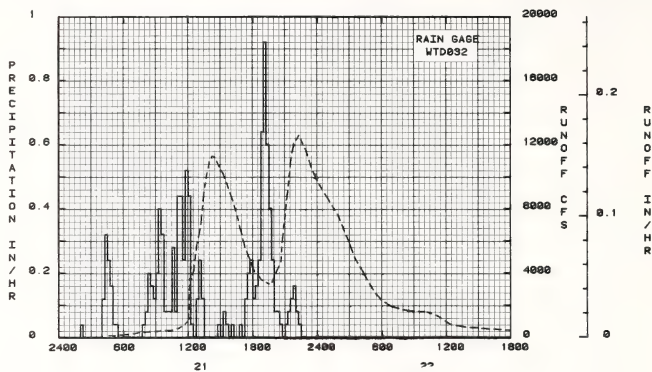
NOTES: To convert discharge in CFS to I#/DAY, multiply by 0.00031736. Quality of records: Good, estimated to be within 10% of actual. Daily discharge values include relatively insignificant flow through auxiliary station 34-A. Runoff for period October 1969 thru December 1970 discontinued, due to dredging in the channel. STA AV based on 14 yr (1957-69, 1971) record period. Part-year amounts are included in station averages.

1971 SELECTED RUNOFF EVENT											OXFORD, MISSISSIPPI WATERSHED W-34		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)			
EVENT OF FEBRUARY 21 - 24, 1971													
RG WTD032			RG WTD032										
2-21	0.0	0.006	2-21	130	0.0	0.0	2-21	438	108.20	0.0			
				145	0.0	0.0		514	119.60	0.0009			
				200	0.0	0.0		558	165.20	0.0023			
				215	0.0400	0.01		628	187.94	0.0035			
				230	0.0	0.01		700	257.70	0.0051			
WATERSHED CONDITIONS:													
about 23% of area in cultivation, primarily cotton, corn and soybeans, poor to fair cover; 29% in pasture and idle land, fair to good cover; 46% in woods, good cover; 1% in bare gullies; 1% urban.													
				345	0.0	0.01		728	308.33	0.0068			
				400	0.0	0.01		830	351.97	0.0113			
				415	0.1200	0.04		928	404.00	0.0161			
				430	0.3200	0.12		1014	433.19	0.0203			
				445	0.2400	0.18		1034	459.02	0.0223			
				500	0.1600	0.22		1108	561.64	0.0261			
				515	0.0400	0.23		1122	680.00	0.0280			
				530	0.0400	0.24		1144	830.00	0.0317			
				545	0.0	0.24		1156	895.00	0.0341			
				600	0.0	0.24		1204	1158.00	0.0360			
				730	0.0	0.24		1210	1366.00	0.0392			
				745	0.0	0.24		1220	1624.00	0.0472			
				800	0.0400	0.25		1232	1716.14	0.0575			
				815	0.0800	0.27		1238	1857.81	0.0635			
				830	0.2000	0.32		1248	1659.98	0.0751			
				885	0.1600	0.36		1302	1644.36	0.0938			
				900	0.1200	0.39		1314	1732.45	0.1120			
				915	0.2000	0.44		1328	1909.97	0.1373			
				930	0.4000	0.54		1346	1026.98	0.1756			
				945	0.3200	0.62		1358	10932.97	0.2036			
				1000	0.0800	0.64		1414	11289.98	0.2428			
				1015	0.0800	0.66		1428	11226.97	0.2775			
				1030	0.0800	0.68		1454	10617.98	0.3401			
				1045	0.2800	0.75		1514	10197.97	0.3860			
				1100	0.0800	0.77		1544	9270.29	0.4504			

NOTES: To convert runoff in CFS to I#/HR, multiply by 0.0003226. Missouri weighted storm rainfall, rain gages 1 thru 31 and 33. For 30-day antecedent P and Q, see table on pp. 62.011-1 and 62.011-2.

1971 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-34				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF FEBRUARY 21 - 24, 1971 (CONTINUED)										
2-21	1115	0.4400	0.88	2-21	1608	8489.97	0.4974			
	1130	0.4400	0.99		1626	7850.61	0.5298			
	1145	0.2400	1.05		1652	6685.97	0.5714			
	1200	0.5200	1.18		1716	5627.97	0.6040			
	1215	0.4400	1.29		1742	4885.50	0.6341			
	1230	0.0400	1.30		1756	4428.21	0.6485			
	1245	0.0	1.30		1810	4084.37	0.6616			
	1300	0.1200	1.33		1832	3792.00	0.6807			
	1315	0.2400	1.39		1852	3540.00	0.6969			
	1330	0.1200	1.42		1916	3396.00	0.7152			
	1345	0.0	1.42		1930	3312.00	0.7256			
	1400	0.0	1.42		1946	3432.00	0.7375			
	1415	0.0	1.42		1958	3708.00	0.7469			
	1430	0.0	1.42		2014	4149.98	0.7608			
	1445	0.0	1.42		2038	4717.97	0.7843			
	1500	0.0400	1.43		2046	6171.98	0.7939			
	1515	0.0	1.43		2058	7376.71	0.8118			
	1530	0.0800	1.45		2116	9129.98	0.8445			
	1545	0.0400	1.46		2132	10911.97	0.8798			
	1600	0.0	1.46		2142	11577.81	0.9046			
	1615	0.0400	1.47		2150	12085.61	0.9255			
	1630	0.0	1.47		2202	12284.97	0.9577			
	1645	0.0	1.47		2218	12584.98	1.0015			
	1700	0.0400	1.48		2240	12035.70	1.0612			
	1715	0.0	1.48		2300	11577.61	1.1133			
	1730	0.1200	1.51		2326	10575.97	1.1767			
	1745	0.2000	1.56		2346	10052.96	1.2223			
	1800	0.2400	1.62		2400	9753.77	1.2529			
	1815	0.1200	1.65	2-22	28	9169.97	1.3113			
	1830	0.1600	1.69		56	8689.98	1.3664			
	1845	0.2400	1.75		124	8169.97	1.4184			
	1900	0.6400	1.91		158	7546.35	1.4773			
	1915	0.9200	2.14		230	6600.98	1.5272			
	1930	0.6000	2.29		252	6043.98	1.5578			
	1945	0.4000	2.39		318	5254.97	1.5902			
	2000	0.2400	2.45		330	4913.26	1.6037			
	2015	0.0800	2.47		346	4592.71	1.6205			
	2030	0.0800	2.49		414	4084.37	1.6473			
	2045	0.0399	2.50		438	3588.00	1.6676			
	2100	0.0	2.50		458	3191.79	1.6825			
	2115	0.0400	2.51		528	2675.64	1.7019			
	2130	0.0800	2.53		556	2321.50	1.7173			
	2145	0.1200	2.56		628	2070.39	1.7328			
	2200	0.1600	2.60		700	1873.00	1.7467			
	2215	0.0800	2.62		708	1846.00	1.7500			
	2230	0.0400	2.63		734	1765.00	1.7603			
	2245	0.0	2.63		820	1656.63	1.7776			
	2300	0.0	2.63		900	1604.13	1.7920			
					926	1578.76	1.8011			
					956	1570.34	1.8115			
					1012	1545.00	1.8170			
					1038	1460.00	1.8256			
					1112	1307.32	1.8360			
					1132	1146.00	1.8414			
					1210	873.52	1.8499			
					1230	755.00	1.8535			
					1312	685.00	1.8602			
					1348	614.84	1.8654			
					1426	589.68	1.8704			
					1600	498.94	1.8817			
					1706	467.81	1.8887			
					1904	412.24	1.9001			
					2040	375.94	1.9084			
					2234	320.06	1.9171			
					2400	292.78	1.9229			
				2-23	158	265.50	1.9302			
					358	246.00	1.9370			
					532	230.35	1.9419			
					600	214.74	1.9492			
					1144	184.15	1.9590			
					1918	153.80	1.9759			
					2400	131.00	1.9848			
				2-24	558	96.80	1.9938			
					1242	89.14	2.0021			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001322. Thiessen weighted storm rainfall, rain pages 1 thru 31 and 33. For 30-day antecedent P and Q, see table on pp. 62.011-1 and 62.011-2.



EVENT OF FEBRUARY 21 - 24, 1971  
OXFORD, MISSISSIPPI WATERSHED W-34

## OXFORD, MISSISSIPPI WATERSHED W-35

LOCATION: Marshall Co., Miss.; 0.3 mi. W of Chulahoma on State Highway No. 4; Cuffawa Creek, Pigeon Boost Creek Watershed, Tazoo River Basin.

AREA: 7550.00 acres 11.80 sq. miles

		OXFORD, MISSISSIPPI WATERSHED W-35											
		MONTHLY PRECIPITATION AND RUPOFF (inches)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Annual											
P	Q	4.25	5.61	3.85	3.21	2.87	4.47	2.63	7.33	3.24	0.62	1.77	4.88
1971	Q	1.311	2.395	0.263	0.053	0.095	0.441	0.0	1.117	0.0	0.0	0.0	0.032
STA AV	P	3.73	4.82	4.90	4.91	4.67	3.22	3.78	3.78	4.69	2.39	4.15	5.29
	Q	1.311	1.763	1.817	1.344	1.009	0.203	0.288	0.348	0.448	0.109	0.601	1.411
		ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUPOFF (inches) FOR SELECTED TIME INTERVALS											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days	
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971		8-26	0.395	8-26	0.365	8-26	0.601	8-26	0.731	2-21	1.166	2-21	1.506
												2-20	1.549
												2-19	1.855
		MAXIMUMS FOR PERIOD OF RECORD											
		5-26	0.880	5-26	0.840	5-26	1.480	2-23	2.190	5-6	2.710	12-3	3.090
		1963		1963		1963		1962		1967		1964	
												1969	
												1965	

NOTES: Watershed conditions: About 31% in cultivation (cotton, corn, soybeans and regrass), fair cover November to March, poor cover April and May improving to good by mid-July; 31% in pasture and idle land; good cover April to October with fair cover remainder of year; 37% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 22% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, P. 62, 12-5. Monthly precipitation Thiessen weighted from 5 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, AR, Mississippi.

		OXFORD, MISSISSIPPI WATERSHED W-35											
		DAILY PRECIPITATION (inches)											
		Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
		Dec											
1	0.0	0.0	0.0	0.0	0.64	0.0	0.82	0.0	0.0	0.11	0.0	0.0	0.0
2	0.0	0.0	0.20	0.0	0.00	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.51
3	0.25	0.10	0.06	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.46
4	0.36	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.03	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.01	0.50	0.0	0.16
6	0.0	0.0	0.34	0.0	0.0	0.0	0.02	0.01	1.34	0.0	0.0	0.34	0.24
7	0.0	0.09	0.0	0.0	0.20	1.13	0.0	0.0	0.0	0.01	0.0	0.0	0.00
8	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.08	1.47	0.0	0.0	0.07	1.15
10	0.0	0.0	0.17	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
11	0.02	0.00	0.0	0.0	0.12	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0
12	0.0	1.10	0.0	0.0	1.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43
13	0.01	0.0	0.45	0.02	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
14	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44
15	0.0	0.0	0.24	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.01	0.0	0.50
16	0.0	0.0	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.78	0.0	0.0	0.03
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.51	0.23	0.0	1.62	0.0	0.0	0.0	0.0	0.0	0.59	0.0
19	0.0	0.78	0.0	0.0	0.0	0.0	0.04	0.0	1.18	0.0	0.06	0.09	0.0
20	0.0	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0
21	0.25	2.12	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.96	0.0	0.08	0.11	0.0	0.0	0.0	0.29	0.0	0.0	0.04	0.0	0.0
23	0.38	0.0	0.51	0.0	0.0	0.0	0.37	0.0	0.0	0.08	0.11	0.0	0.0
24	1.55	0.0	0.0	0.26	0.0	0.0	1.31	0.0	0.0	0.00	0.0	0.0	0.0
25	0.0	0.04	1.14	0.0	0.0	0.0	0.52	0.16	0.0	0.0	0.0	0.0	0.0
26	0.0	0.58	0.0	0.0	0.0	0.0	0.0	2.74	0.67	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.41	0.16	0.0	0.0	0.01	0.0	0.0	0.0	0.0
28	0.0	0.0	0.38	0.0	0.0	0.13	0.0	0.0	0.0	0.56	0.15	0.0	0.0
29	0.0	0.03	0.21	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.0
30	0.0	0.0	0.20	0.0	0.0	0.14	0.03	0.0	0.0	0.0	0.0	0.63	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0
TOTAL	4.25	5.61	3.85	3.21	2.87	4.47	2.63	7.33	3.24	0.62	1.77	4.88	
STA AV	3.73	4.82	4.90	4.91	4.67	3.22	3.78	3.78	4.69	2.39	4.15	5.29	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 10, 11, 20, 21 and 24. STA AV based on 15 yr (1957-71) record period.

1971												OXFORD, MISSISSIPPI		WATERSHED W-35	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	8.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	2.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	18.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	8.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	1.16	0.0	0.0	0.0	0.0	63.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	13.90	0.0	6.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.27	0.0	0.0	0.0	0.0	0.0	2.61	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.23	0.0	0.0	0.0	0.0	0.0	0.05	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	127.53	0.0	0.0	20.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	18.96	15.14	0.0	5.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.43	0.0
16	0.0	0.0	0.0	0.0	0.0	15.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	1.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.18	0.0	0.0	104.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	50.41	1.27	0.0	0.0	4.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	8.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	415.97	0.0	3.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	28.86	76.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	16.50	0.70	0.0	2.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	354.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	15.76	0.0	58.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.60	37.49	3.45	0.0	0.0	0.0	0.0	229.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.36	0.0	0.0	0.0	0.0	0.0	11.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	3.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	13.410	27.128	2.694	0.558	0.973	4.665	0.0	11.429	0.0	0.0	0.0	0.0	0.0	0.331	0.0
INCHES	1.311	2.395	0.263	0.053	0.095	0.441	0.0	1.117	0.0	0.0	0.0	0.0	0.0	0.032	0.0
STA AV	1.311	1.763	1.817	1.344	1.009	0.203	0.288	0.348	0.448	0.109	0.601	1.411			

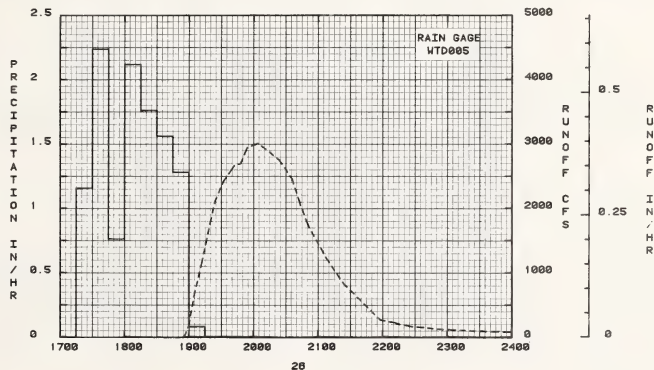
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0031525. Quality of records: Fair, estimated to be within 15% of actual. STA AV based on 15 yr (1957-71) record period.

1971			SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-35			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 26 - 27, 1971														
RG WTD005			RG WTD005											
8-26	0.0	0.0	8-26	1700	0.0	0.0	8-26	1856	0.875	0.0				
				1715	0.0	0.0		1900	183.128	0.0008				
				1730	1.1600	0.29		1906	717.998	0.0066				
				1745	2.2400	0.85		1912	1149.999	0.0191				
				1800	0.7600	1.04		1916	1461.999	0.0305				
WATERSHED CONDITIONS:														
About 31% of area in cultivation, primarily cotton, corn, soybeans and ryegrass;														
31% in pasture and idle land, fair to good cover; 37% in woods, good cover; 1% in bare gullies.														
				1815	2.1200	1.57		1920	1785.997	0.0447				
				1830	1.7597	2.01		1924	2103.998	0.0617				
				1845	1.5590	2.40		1932	2415.998	0.1011				
				1900	1.2800	2.72		1942	2661.999	0.1571				
				1915	0.0800	2.74		1948	2657.999	0.1915				
				1930	0.0	2.74		1954	2937.998	0.2291				
				1945	0.0	2.74		2004	3009.999	0.2947				
				2000	0.0	2.74		2008	2961.998	0.3207				
								2024	2745.998	0.4203				
								2036	2451.999	0.4883				
								2044	2043.998	0.5275				
								2052	1695.998	0.5401				
								2108	1221.999	0.6118				
								2124	826.000	0.6475				
								2158	263.198	0.6880				
								2208	231.938	0.6935				
								2216	194.695	0.6972				
								2228	158.866	0.7018				
								2238	147.536	0.7052				
								2252	117.127	0.7092				
								2308	106.990	0.7132				
								2332	85.990	0.7182				
								2348	80.719	0.7211				
								2400	77.056	0.7232				
								8-27	42	61.600	0.7296			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gauges 10, 11, 20, 21 and 24. For 30-day antecedent P and Q, see tables on pp. 62.012-1 and 2.

1971      SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI		WATERSHED W-35		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 26 - 27, 1971 (CONTINUED)										
							8-27	128	51.938	0.7353
								220	41.528	0.7406
								314	33.900	0.7451
								414	26.200	0.7490
								516	20.668	0.7522
								558	16.226	0.7539
								702	11.928	0.7559
								816	7.500	0.7575
								1032	3.000	0.7591
								1226	1.491	0.7597
								1906	0.296	0.7605

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gages 10, 11, 20, 21 and 28. For 30-day antecedent P and Q, see tables on pp. 62.012-1 and 2.



EVENT OF AUGUST 26 - 27, 1971  
OXFORD, MISSISSIPPI WATERSHED W-35

## OXFORD, MISSISSIPPI WATERSHED W-17A

LOCATION: Marshall Co., Miss.: 7.8 mi. SW of Holly Springs on County road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 3200.00 acres 5.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-17A	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
P	4.64	5.49	3.49	3.25	3.64	2.57	3.22	3.40	2.94	0.26	1.98	4.19	39.08	
Q	1.165	2.517	0.018	0.037	0.043	0.044	0.027	0.053	0.012	0.0	0.0	0.046	3.959	
STA AV	3.48	4.53	4.81	5.15	3.97	2.77	4.24	4.47	3.98	2.18	3.51	5.32	48.41	
Q	0.723	1.383	1.383	1.162	0.566	0.110	0.297	0.352	0.387	0.071	0.331	0.885	7.650	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Volume for Selected Time Interval														
Maximum Discharge	1 Hour				2 Hours				6 Hours				12 Hours	
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date
1971	2-21	0.213	2-21	0.211	2-21	0.421	2-21	1.105	2-21	1.672	2-21	2.138	2-21	2.200
													2-18	2.272
MAXIMUMS FOR PERIOD OF RECORD														
	7-9	0.490	7-9	0.490	7-9	0.960	7-9	2.570	7-9	3.510	7-9	3.650	7-9	3.660
	1967		1967		1967		1967		1967		1967		1967	1969

NOTES: Watershed conditions: About 14% of area in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improves to good by mid-July; 17% in pasture and idle land, good cover April to October with fair cover remainder of year; 68% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 38% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.5-5. Monthly precipitation Thiessen weighted from rain gages 2, 17, 22 and 28. Precipitation and runoff records began Jan. 1957; but station averages were computed starting with 1958. Maximum discharges and volumes were not computed prior to 1961; poor records 1958-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

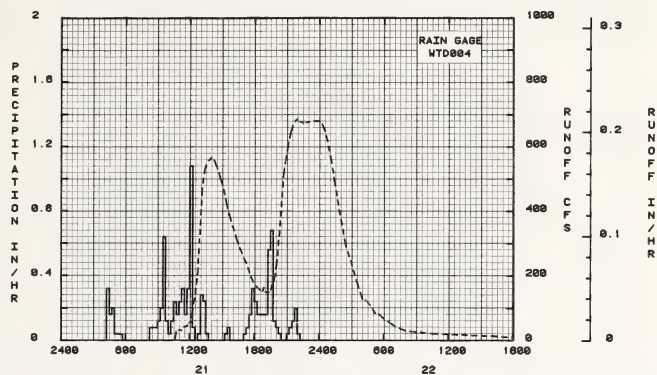
1971 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-17A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.83	0.0	0.22	0.0	0.0	0.07	0.0	0.0	0.0		
2	0.0	0.0	0.23	0.0	0.02	0.0	0.0	0.0	0.47	0.0	0.0	0.42		
3	0.33	0.07	0.06	0.0	0.0	0.0	0.0	0.10	0.02	0.0	0.0	0.46		
4	0.30	0.72	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.00	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.02	0.15	0.0	0.19		
6	0.0	0.0	0.34	0.0	0.0	0.0	0.08	0.27	0.0	0.0	0.34	0.25		
7	0.0	0.07	0.0	0.0	0.22	0.10	0.0	0.0	0.22	0.0	0.0	0.01		
8	0.0	0.05	0.0	0.0	0.02	0.01	0.0	0.0	0.00	0.0	0.0	0.0		
9	0.0	0.0	0.15	0.0	0.0	0.0	0.04	0.56	0.0	0.0	0.06	1.16		
10	0.0	0.0	0.17	0.0	0.37	0.0	0.0	0.01	0.0	0.0	0.0	0.05		
11	0.02	0.0	0.0	0.0	0.10	0.0	0.0	0.32	0.0	0.0	0.0	0.0		
12	0.0	1.02	0.0	0.0	1.91	0.0	0.0	0.0	0.0	0.0	0.0	0.19		
13	0.0	0.0	0.30	0.02	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
14	0.50	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.29		
15	0.0	0.0	0.22	0.0	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.64		
16	0.0	0.0	0.0	0.0	0.0	0.93	0.0	0.0	0.44	0.0	0.0	0.04		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0		
18	0.0	0.0	0.46	0.10	0.0	1.06	0.0	0.06	0.0	0.0	0.88	0.0		
19	0.0	0.83	0.0	0.0	0.0	0.0	0.05	0.0	0.96	0.0	0.08	0.10		
20	0.0	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
21	0.30	2.27	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	1.71	0.0	0.0	0.14	0.0	0.0	0.0	0.41	0.0	0.0	0.02	0.0		
23	0.46	0.0	0.0	0.78	0.0	0.0	0.93	0.0	0.0	0.00	0.13	0.0		
24	0.02	0.0	0.0	0.0	0.78	0.0	1.56	0.0	0.0	0.09	0.0	0.0		
25	0.0	0.0	1.07	0.0	0.0	0.0	0.22	0.0	0.02	0.0	0.0	0.0		
26	0.0	0.47	0.0	0.0	0.0	0.0	0.01	1.13	0.65	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.19	0.05	0.0	0.0	0.03	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.47	0.05		
29	0.0	0.07	0.21	0.0	0.00	0.11	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.12	0.0	0.0	0.0	0.16	0.02	0.0	0.0	0.0	0.33		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0		
TOTAL	4.64	5.49	3.49	3.25	3.64	2.57	3.22	3.40	2.94	0.26	1.98	4.19		
STA AV	3.48	4.53	4.81	5.15	3.97	2.77	4.24	4.47	3.98	2.18	3.51	5.32		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 17, 22 and 28. STA AV based on 14 yr (1958-71) record period.



1971 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI				WATERSHED W-17A			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF FEBRUARY 21 - 24, 1971 (CONTINUED)										
2-21			1345		0.0400	1.37	2-21	1650	268.000	0.5994
			1515		0.0	1.37		1714	238.000	0.6308
			1530		0.0400	1.38		1742	193.791	0.6620
			1545		0.0800	1.40		1808	167.128	0.6862
			1630		0.0	1.40		1832	155.291	0.7062
			1645		0.0002	1.40		1844	151.837	0.7157
			1700		0.0002	1.40		1854	163.752	0.7239
			1715		0.0400	1.41		1904	148.375	0.7320
			1730		0.0800	1.43		1920	148.375	0.7443
			1745		0.1600	1.47		1934	157.000	0.7553
			1800		0.3200	1.55		1952	192.000	0.7715
			1815		0.2400	1.61		2004	234.000	0.7847
			1830		0.1600	1.65		2020	340.000	0.8084
			1845		0.1600	1.69		2034	460.000	0.8373
			1900		0.1600	1.73		2042	518.000	0.8575
			1915		0.1592	1.77		2052	558.000	0.8853
			1930		0.5600	1.91		2104	598.000	0.9212
			1945		0.6800	2.08		2118	638.000	0.9659
			2000		0.1200	2.11		2132	666.000	1.0131
			2015		0.0800	2.13		2148	681.999	1.0686
			2030		0.0404	2.14		2158	685.999	1.1041
			2045		0.0	2.14		2212	678.000	1.1534
			2100		0.0	2.14		2232	674.000	1.2232
			2115		0.0400	2.15		2246	676.000	1.2720
			2130		0.0800	2.17		2304	678.000	1.3350
			2145		0.1200	2.20		2330	680.000	1.4262
			2200		0.2000	2.25		2400	680.000	1.5316
			2215		0.0400	2.26	2-22	16	670.000	1.5874
			2230		0.0400	2.27		32	648.000	1.6418
								46	616.000	1.6875
								110	548.000	1.7596
								130	477.998	1.8126
								202	372.000	1.8828
								232	288.000	1.9339
								304	230.000	1.9767
								334	175.759	2.0081
								402	127.968	2.0301
								420	125.000	2.0419
								444	108.614	2.0564
								514	82.584	2.0712
								534	81.368	2.0797
								602	66.352	2.0904
								704	43.968	2.1081
								802	30.055	2.1192
								900	25.480	2.1275
								1036	21.155	2.1391
								1606	13.249	2.1684
								2104	9.586	2.1860
								2400	5.868	2.1930
								2400	0.175	2.2155
							2-24	2400	0.102	2.2165

NOTES: To convert runoff in CFS to I<sup>3</sup>/H<sup>3</sup>, multiply by 0.0003099. Thiessen weighted storm rainfall, rain gages 2, 17, 22 and 28. For 30-day antecedent P and Q, see tables on pp. 62.017-1 and 2.



EVENT OF FEBRUARY 21 - 24, 1971  
OXFORD, MISSISSIPPI WATERSHED W-17A

## OXFORD, MISSISSIPPI WATERSHED W-35A

LOCATION: Marshall Co., Miss.; 0.3 mi. W of Chulahoma on State Highway No. 4; Cuffawa Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1090.00 acres 1.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						OXFORD, MISSISSIPPI WATERSHED W-35A											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
1971 P	4.20	5.63	3.72	3.07	2.99	4.38	2.48	7.48	2.98	0.63	1.89	4.88	44.38				
Q	1.747	2.727	0.960	0.300	0.176	0.864	0.064	1.053	0.026	0.0	0.0	0.309	8.162				
STA AV P	3.46	4.67	5.02	4.75	4.38	2.95	3.95	3.85	4.17	2.31	3.79	5.33	48.63				
Q	1.473	1.959	2.266	1.401	1.055	0.246	0.425	0.482	0.420	0.123	0.572	1.598	12.019				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
Date Rate		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.	
1971		6-18 0.511		6-18 0.462		6-18 0.676		6-18 0.789		2-21 0.952		2-21 1.235		2-21 1.302		2-19 1.790	
MAXIMUMS FOR PERIOD OF RECORD																	
7-9 1.300		7-9 1.270		7-9 2.390		7-9 3.240		7-9 3.280		11-27 3.710		11-27 3.800		3-24 5.120			
1967		1967		1967		1967		1967		1968		1968		1965			

NOTES: Watershed conditions: About 28% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 45% in pasture and idle land, good cover April to October with fair cover remainder of year; 30% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 6% of drainage area above small deslitting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.12-5. Monthly precipitation Thiessen weighted from rain gages 3, 11, 24 and 26. Precipitation and runoff records began Jan. 1957; but station averages were computed starting with 1956. Maximum discharges and volumes were not computed prior to 1961; poor records 1957-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 48, Mississippi.

1971 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-35A			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0				
2	0.0	0.0	0.15	0.0	0.00	0.0	0.0	0.0	0.22	0.0	0.01	0.51				
3	0.30	0.11	0.03	0.0	0.0	0.0	0.0	0.16	0.06	0.0	0.0	0.49				
4	0.30	0.71	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.02	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.51	0.0	0.17				
6	0.0	0.0	0.33	0.0	0.0	0.03	0.10	1.97	0.0	0.0	0.38	0.24				
7	0.0	0.07	0.0	0.0	0.22	1.07	0.0	0.02	0.0	0.0	0.0	0.00				
8	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
9	0.0	0.0	0.25	0.0	0.0	0.0	0.02	1.26	0.0	0.0	0.05	1.18				
10	0.0	0.0	0.20	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.03				
11	0.02	0.01	0.0	0.0	0.12	0.0	0.0	0.31	0.0	0.0	0.0	0.0				
12	0.0	1.09	0.0	0.0	1.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.41	0.03	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.04				
14	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39				
15	0.0	0.0	0.21	0.0	0.0	0.12	0.0	0.0	0.0	0.00	0.0	0.49				
16	0.0	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.70	0.0	0.0	0.03				
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
18	0.0	0.0	0.52	0.23	0.0	1.83	0.0	0.0	0.0	0.0	0.68	0.0				
19	0.0	0.76	0.0	0.0	0.0	0.0	0.03	0.0	1.26	0.0	0.06	0.08				
20	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0				
21	0.26	2.14	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
22	0.89	0.0	0.09	0.15	0.0	0.0	0.0	0.20	0.0	0.0	0.04	0.0				
23	0.40	0.0	0.03	0.38	0.0	0.0	0.17	0.0	0.10	0.11	0.0	0.0				
24	1.49	0.0	0.0	0.0	0.33	0.0	1.31	0.0	0.0	0.0	0.0	0.0				
25	0.0	0.03	1.12	0.0	0.0	0.0	0.51	0.0	0.00	0.0	0.0	0.0				
26	0.0	0.64	0.0	0.0	0.0	0.0	0.0	2.66	0.61	0.0	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.36	0.13	0.0	0.0	0.02	0.0	0.0	0.0				
28	0.0	0.0	0.38	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.56	0.0				
29	0.03	0.0	0.21	0.0	0.0	0.11	0.07	0.0	0.0	0.0	0.0	0.00				
30	0.0	0.0	0.0	0.18	0.0	0.0	0.15	0.03	0.0	0.0	0.0	0.63				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0				
TOTAL	4.20	5.63	3.72	3.07	2.99	4.38	2.48	7.48	2.98	0.63	1.89	4.88				
STA AV	3.46	4.67	5.02	4.75	4.38	2.95	3.95	3.85	4.17	2.31	3.79	5.33				

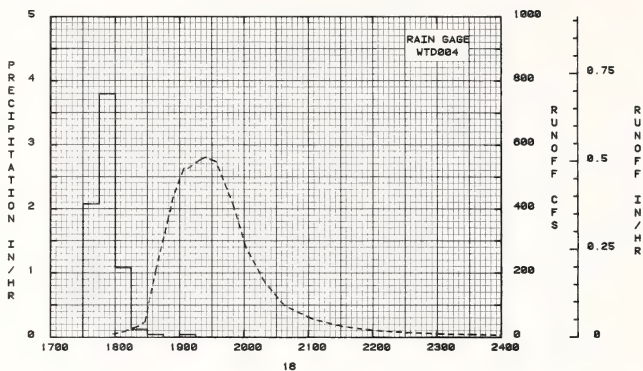
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 3, 11, 24 and 26. STA AV based on 14 yr (1958-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												OXFORD, MISSISSIPPI		WATERSHED W-35A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.075	0.0	1.133	2.752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.037	0.0	0.917	2.104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
3	0.674	0.0	0.806	0.606	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4	4.375	4.536	0.625	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	1.059	2.995	0.208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.255	0.917	1.272	0.0	0.0	0.0	0.0	15.230	0.0	0.0	0.0	0.0			
7	0.0	0.448	0.854	0.0	0.0	0.875	0.0	1.773	0.0	0.0	0.0	0.0			
8	0.0	0.097	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.057	0.0	0.126	0.0	0.0	0.0	0.0	2.160	0.0	0.0	0.0	0.0			3.773
10	0.0	0.255	2.559	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.926
11	0.0	0.939	1.021	0.0	0.0	0.0	0.0	0.175	0.0	0.0	0.0	0.0			0.0
12	0.0	24.216	0.625	0.0	4.318	0.0	0.0	0.078	0.0	0.0	0.0	0.0			1.601
13	0.0	2.797	3.708	0.0	3.276	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.683
14	4.731	0.806	1.034	0.0	0.455	0.0	0.0	0.0	0.0	0.0	0.0	0.0			1.234
15	1.182	0.910	2.305	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			5.486
16	0.511	0.806	0.492	0.0	0.0	1.544	0.0	0.0	0.0	0.0	0.0	0.0			0.455
17	0.293	0.388	0.037	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0			0.0
18	0.037	0.037	0.548	0.0	0.0	36.195	0.0	0.0	0.0	0.0	0.0	0.0			0.0
19	0.0	8.259	2.155	0.0	0.0	0.622	0.0	0.0	0.425	0.0	0.0	0.0			0.0
20	0.0	2.129	0.388	0.096	0.0	0.0	0.0	0.0	0.587	0.0	0.0	0.0			0.0
21	0.015	50.229	0.037	5.762	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
22	9.254	9.516	0.0	0.451	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
23	5.608	1.858	0.0	1.472	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
24	47.442	1.034	0.0	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
25	2.698	0.806	14.451	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
26	0.939	7.896	1.899	0.0	0.0	0.0	0.0	28.099	0.162	0.0	0.0	0.0			0.0
27	0.426	1.670	0.806	0.0	0.0	0.0	0.0	0.727	0.0	0.0	0.0	0.0			0.0
28	0.208	1.133	1.456	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
29	0.075	2.835	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
30	0.037	0.917	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
31	0.0	0.388	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0
MEAN	2.5803	4.4600	1.8186	0.4585	0.2597	1.3182	0.0	1.5562	0.0391	0.0	0.0	0.4568			
INCHES	1.747	2.727	0.960	0.300	0.174	0.864	0.0	1.053	0.026	0.0	0.0	0.309			
STA AY	1.473	1.959	2.266	1.401	1.055	0.246	0.425	0.482	0.420	0.123	0.572	1.598			

NOTES: To convert discharge in CFS to IY/DAY, multiply by 0.0218364. Quality of records: Fair, estimated to be within 15% of actual. STA AY based on 14 yr (1958-71) record period.

1971 SELECTED RUNOFF EVENT						OXFORD, MISSISSIPPI		WATERSHED W-35A		
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JUNE 18 - 19, 1971										
RG WTD004			RG WTD004							
6-18	0.04	0.001	6-18	1730	0.0	0.0	6-18	1758	9,629	0.0
				1745	2.0800	0.52		1808	17,485	0.0021
				1800	3.8000	1.47		1822	35,000	0.0077
				1815	1.0800	1.74		1828	48,875	0.0115
				1830	0.1200	1.77		1838	208,995	0.0311
WATERSHED CONDITIONS:										
About 24% of area in cultivation, primarily cotton, soybeans and corn; 45% in pasture and idle land, fair to good cover; 30% in woods, good cover; 1% in bare gul-lies.										
			1845	0.0400	1.78		1850	377,119	0.0804	
			1900	0.0	1.78		1854	437,000	0.1022	
			1915	0.0400	1.79		1904	527,000	0.1699	
			1930	0.0	1.79		1908	527,000	0.2142	
			1945	0.0	1.79		1918	552,000	0.2959	
			2000	0.0	1.79		1924	562,000	0.3466	
							1934	547,000	0.4307	
							1950	412,000	0.5470	
							2002	277,728	0.6097	
							2020	168,000	0.6705	
							2038	98,280	0.7068	
							2104	56,120	0.7372	
							2132	33,320	0.7562	
							2200	21,320	0.7678	
							2232	14,559	0.7765	
							2302	10,313	0.7822	
							2332	8,027	0.7864	
							2400	6,059	0.7894	
							6-19	46	4,029	0.7929
								150	2,874	0.7962
								302	2,350	0.7991
								432	1,608	0.8018
								730	0.511	0.8047
								1158	0.341	0.8064

NOTES: To convert runoff in CFS to IY/HR, multiply by 0.0009098. Thiessen weighted storm rainfall, rain gages 3, 11, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.018-1 and 2.



## TONBESTONE, ARIZONA WATERSHED W-1

LOCATION: Cochise County, Arizona; 5.6 miles W of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 36900.00 acres 57.66 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA WATERSHED W-1												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
P	0.03	0.26	0.0	0.45	0.00	0.26	2.88	4.87	1.64	1.55	0.16	1.44	13.55												
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.209	0.001	0.001	0.0	0.0	0.230												
STA AV	0.25	0.60	0.71	0.25	0.11	0.09	3.23	4.06	1.19	0.45	0.24	0.73	11.90												
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.085	0.005	0.000	0.0	0.0	0.112												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge													Maximum Volume for Selected Time Interval												
Date	Date	1 Hour	Date	2 Hours	Date	6 Hours	Date	12 Hours	Date	1 Day	Date	2 Days	Date	8 Days											
Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.											
1971	8-10	0.097	8-10	0.072	8-10	0.096	8-10	0.111	8-11	0.111	8-11	0.111	8-10	0.154											
MAXIMUMS FOR PERIOD OF RECORD																									
7-22	0.130	7-22	0.080	9-9	0.130	9-9	0.160	9-9	0.190	9-9	0.190	9-8	0.230	9-8	0.310										
1964		1964		1964		1964		1964		1964		1964		1964											

NOTES: Watershed Conditions: 65% of area in desert shrubs (whitebush, creosotebush and tarbush) with 25% cover and 2% grass cover. 35% is grassland with approximately 20% grass cover (crown beard) and 5% shrub cover. For topography, geological and vegetation maps, see pages 63-1-3, 63-1-4, and 63-1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation data: records began January 1954. Monthly totals are Thiessen weighted averages of 90 gages. Station averages are based on 1968-71 data. Runoff Data: Records began April 1964, station averages are based on 1960, 1968-71 data. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

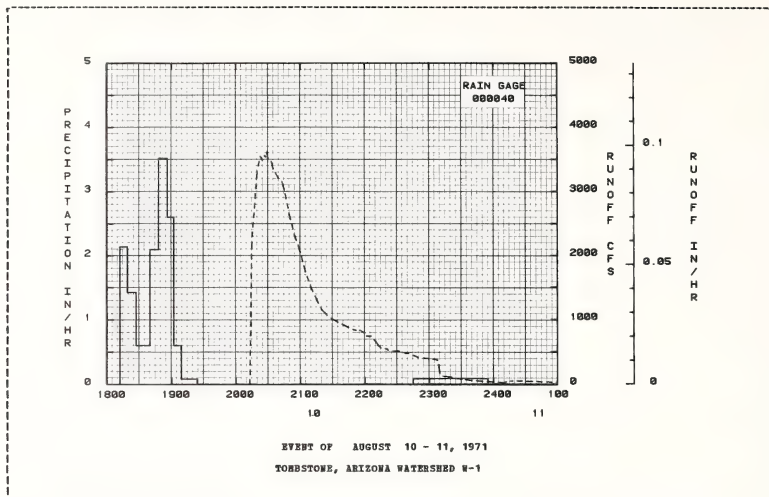
1971 DAILY AIR TEMPERATURE (degrees F)													TOMBSTONE, ARIZONA WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min		max	min	max	min	max	min	max	min	max	min	max	min
1	68	42	74	47	52	32	76	44	88	55	88	52	97	68	86	64	93	69	77	60	71	39	63	46	
2	60	48	70	48	47	18	79	45	88	56	83	57	90	70	90	68	87	64	79	52	76	44	57	38	
3	35	28	57	47	64	24	78	47	87	55	81	59	93	66	93	69	88	64	81	51	74	47	59	38	
4	36	17	56	23	75	39	78	48	86	50	88	50	98	70	90	62	90	65	71	57	79	50	47	39	
5	36	17	62	32	68	48	76	46	75	46	90	58	96	66	90	70	94	64	74	54	79	54	51	32	
6	30	15	61	35	66	33	75	54	69	51	93	58	90	67	82	68	91	68	75	55	71	52	57	36	
7	38	15	58	32	67	38	79	50	77	51	89	58	96	65	92	64	91	69	76	55	76	49	51	41	
8	47	18	63	34	73	46	79	50	78	53	91	58	95	70	94	69	90	71	80	54	75	47	37	29	
9	56	27	60	37	70	39	83	50	79	51	98	73	92	67	91	65	80	54	74	50	44	28			
10	61	31	70	35	70	40	88	52	80	52	86	57	101	82	86	65	95	70	77	59	76	50	52	27	
11	64	39	73	42	72	45	89	54	79	53	86	61	103	72	82	61	94	70	69	59	80	54	58	40	
12	63	40	69	42	73	42	88	53	73	58	86	59	104	76	86	65	91	68	81	79	58	56	27		
13	61	36	75	46	71	48	87	54	81	50	92	62	104	74	86	60	90	67	83	59	74	48	61	38	
14	64	32	76	43	62	33	78	56	88	58	96	61	99	73	88	66	95	64	85	59	71	50	41	26	
15	66	39	73	47	70	36	58	39	89	60	99	65	95	69	87	66	97	67	80	60	62	49	58	28	
16	74	42	72	46	75	43	73	38	87	60	100	69	96	69	91	69	96	66	71	58	47	40	45	26	
17	76	45	64	51	77	45	75	51	81	57	96	72	98	73	87	67	93	68	60	53	53	37	46	25	
18	81	49	52	36	73	46	58	47	74	46	101	72	99	68	83	66	83	60	62	42	57	32	40	34	
19	75	52	64	33	72	41	53	31	85	47	100	67	96	69	84	63	79	55	64	36	56	38	56	36	
20	82	53	42	34	73	52	69	36	89	54	100	66	98	65	87	65	82	58	73	43	61	40	61	37	
21	71	55	49	21	76	39	66	46	85	62	101	68	96	71	86	66	81	57	80	53	67	38	58	40	
22	70	48	69	29	79	45	68	39	80	58	98	72	93	70	87	65	79	56	81	52	60	37	60	47	
23	65	44	60	34	84	47	77	46	76	45	100	72	95	71	89	66	77	50	79	52	66	36	68	49	
24	68	38	48	39	80	52	77	47	84	53	98	72	93	64	83	66	80	52	68	56	65	42	73	50	
25	65	38	63	35	80	50	73	52	90	60	94	66	94	64	86	68	88	60	62	53	70	43	72	43	
26	70	38	59	37	87	54	71	43	86	62	96	69	96	73	88	65	87	64	60	39	71	43	65	50	
27	74	46	59	30	83	54	75	45	88	64	98	72	98	70	93	69	87	62	71	42	71	43	62	42	
28	73	42	55	28	82	53	69	47	83	61	94	68	94	68	90	67	89	63	72	54	60	41	57	46	
29	73	44	60	34	84	47	77	46	76	45	100	72	95	71	89	66	77	50	79	52	66	36	68	49	
30	74	39			85	58	84	51	82	49	99	66	96	69	93	70	79	60	62	57	64	46	55	29	
31	74	40			77	50			84	53			92	70	92	69			73	46				45	
AV.	63	37	63	37	73	43	75	47	82	54	94	64	96	70	88	66	88	63	73	51	69	45	55	37	
REAR	50.1	50.0	58.3	61.1	67.9	78.7	83.1	77.2	78.7	83.1	77.2	78.7	83.1	77.2	78.7	83.1	77.2	78.7	83.1	77.2	78.7	83.1	77.2	78.7	
STA AV	59	35	60	36	67	40	74	45	84	53	91	61	93	67	89	65	85	60	78	52	67	43	59	37	

NOTES: STA AV values are based on 8 yr (1964-1971) record period.



1971 SELECTED RUNOFF EVENT										TOMBSTONE, ARIZONA WATERSHED W-1									
PRECEDENT CONDITIONS					RAINFALL					RUNOFF									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 10 - 11, 1971																			
RG 000040					RG 000040														
8-10	0.0	0.0	8-10	1812	0.0	0.0	8-10	2013	0.0	0.0									
				1819	2.1428	0.25		2015	2218.905	0.0010									
				1827	1.4250	0.44		2020	3328.083	0.0071									
				1840	0.6000	0.57		2023	3549.628	0.0118									
				1848	2.1000	0.85		2025	3488.413	0.0148									
WATERSHED CONDITIONS:																			
65% of area in desert shrubs					1856					2027					3566.028				
(Whitethorn, creosotebush and					1902					2028					3533.265				
tarbush) with 23% cover and					1909					2029					3615.464				
2% grass cover. 35% is in					1928					2030					3516.583				
grassland with approximately					2245					2033					3468.206				
20% grass cover (crown																			
spread) and 5% shrub cover.					2355					2035					3355.842				
						0.0857	1.77			2040					3198.611				
										2043					3152.198				
										2045					3030.126				
										2050					2631.131				
										2055					2302.896				
										2100					2054.023				
										2105					1742.708				
										2110					1503.559				
										2115					1324.177				
										2120					1156.375				
										2125					1066.729				
										2130					1009.367				
										2135					961.312				
										2140					920.914				
										2145					876.142				
										2150					841.110				
										2152					832.460				
										2156					832.460				
										2200					789.875				
										2202					740.218				
										2206					740.218				
										2210					660.965				
										2215					557.398				
										2221					543.310				
										2222					515.658				
										2232					508.856				
										2238					475.510				
										2241					475.510				
										2250					412.142				
										2306					379.999				
										2308					373.456				
										2310					163.816				
										2313					118.804				
										2321					106.325				
										2325					89.401				
										2330					73.000				
										2340					55.000				
										2350					41.000				
										2400					29.318				
										8-11					7				
															12				
															16				
															18				
															32				
															101				
															130				
															203				
															231				
															308				
															0.0				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000269.

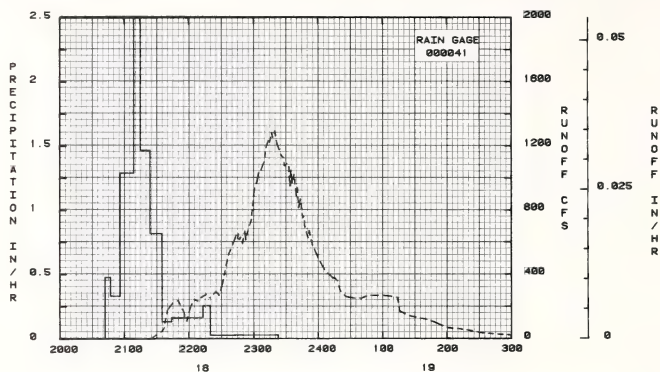


1971 SELECTED RUNOFF EVENT					TOMBSTONE, ARIZONA WATERSHED W-1				
PRECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)
EVENT OF AUGUST 18 - 19, 1971									
RG 000041			RG 000041						
8-18	0.16	0.0	8-18	2042	0.0	0.0	8-18	2110	0.0
				2047	0.4800	0.04		2117	0.087
				2056	0.3333	0.09		2124	0.406
				2109	1.2923	0.37		2125	4.611
				2115	2.4998	0.62		2127	11.551
WATERSHED CONDITIONS:									
65% of area is desert shrubs			2124	1.4667	0.84		2130	27.980	0.00
(Whitethorn, creosotebush and			2135	0.8162	0.99		2135	48.698	0.0001
turbush) with 23% cover and			2144	0.1333	1.01		2137	70.231	0.0001
24 grass cover. 35% is in			2213	0.1655	1.09		2140	179.885	0.0003
grassland with approximately			2220	0.2571	1.12		2145	224.758	0.0008
20% grass cover (crown			2242	0.0273	1.13		2150	239.839	0.0013
spread) and 5% shrub cover.			2323	0.0293	1.15		2155	169.065	0.0018
							2158	106.325	0.0020
							2201	191.142	0.0022
							2205	244.985	0.0026
							2208	234.753	0.0029
							2212	260.780	0.0033
							2216	277.115	0.0038
							2219	255.455	0.0042
							2220	255.455	0.0043
							2225	293.990	0.0049
							2228	271.610	0.0053
							2230	311.412	0.0056
							2232	366.975	0.0059
							2235	462.481	0.0065
							2237	529.396	0.0069
							2239	557.398	0.0074
							2241	593.396	0.0079
							2244	645.642	0.0087
							2245	622.986	0.0090

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000269.

1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA WATERSHED W-1					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 18 - 19, 1971 (CONTINUED)											
8-18							2246		653.281	0.0093	
							2247		615.521	0.0096	
							2248		630.492	0.0099	
							2250		593.396	0.0105	
							2252		666.690	0.0110	
							2253		615.521	0.0113	
							2255		676.464	0.0118	
							2258		740.218	0.0128	
							2301		936.988	0.0139	
							2303		975.123	0.0147	
							2305		1033.115	0.0156	
							2307		1049.967	0.0165	
							2310		1100.000	0.0180	
							2312		1208.490	0.0191	
							2314		1233.854	0.0201	
							2315		1224.023	0.0207	
							2317		1283.620	0.0218	
							2318		1253.635	0.0223	
							2320		1293.697	0.0235	
							2322		1213.049	0.0246	
							2324		1176.502	0.0257	
							2326		1140.367	0.0267	
							2328		1126.031	0.0278	
							2329		1076.371	0.0283	
							2331		1090.476	0.0293	
							2333		1069.343	0.0302	
							2334		949.239	0.0307	
							2335		1048.362	0.0311	
							2336		969.360	0.0315	
							2337		989.725	0.0319	
							2338		1020.624	0.0324	
							2340		888.729	0.0332	
							2341		939.270	0.0336	
							2342		812.364	0.0341	
							2344		866.464	0.0348	
							2346		750.354	0.0356	
							2347		760.469	0.0359	
							2348		691.449	0.0362	
							2351		626.568	0.0371	
							2352		672.496	0.0374	
							2355		581.771	0.0383	
							2400		504.245	0.0396	
8-19							6		428.760	0.0408	
							14		375.136	0.0422	
							15		380.887	0.0424	
							18		358.193	0.0429	
							21		292.023	0.0433	
							26		261.152	0.0439	
							34		250.000	0.0448	
							40		250.000	0.0455	
							45		264.919	0.0461	
							49		268.716	0.0466	
							56		268.716	0.0474	
							104		264.919	0.0484	
							114		253.692	0.0495	
							116		168.894	0.0497	
							121		153.525	0.0501	
							126		138.894	0.0504	
							131		130.469	0.0507	
							141		118.437	0.0512	
							148		102.944	0.0515	
							156		77.870	0.0518	
							201		66.451	0.0520	
							219		52.866	0.0525	
							234		32.140	0.0528	
							259		21.071	0.0531	
							352		9.278	0.0535	
							521		2.590	0.0537	
							654		0.667	0.0538	
							850		0.0	0.0538	

NOTES: To convert runoff in CFS to in/hr, multiply by 0.0000269.



EVENT OF AUGUST 18 - 19, 1971  
TONSSTONE, ARIZONA WATERSHED #1

## TOMBSTONE, ARIZONA WATERSHED W-2

LOCATION: Cochise County, Arizona; 2-3/4 miles NW of Tombstone, Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 28100.00 acres 43.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA WATERSHED W-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971 P	0.03	0.25	0.0	0.85	0.00	0.32	3.09	5.07	1.62	1.51	0.17	1.48	13.94	
STA AV P	0.27	0.62	0.69	0.25	0.11	0.10	3.19	4.07	1.19	0.44	0.26	0.73	11.92	
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.051	0.117	0.010	0.000	0.000	0.000	0.179	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUME OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge	1 Hour				2 Hours				Maximum Volume for Selected Time Interval				2 Days	
Date	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Vol.
1971	8-10	0.134	8-10	0.109	8-10	0.142	8-10	0.153	8-10	0.154	8-10	0.154	8-10	0.154
	7-26	0.160	7-26	0.130	7-26	0.170	7-26	0.210	9-9	0.240	9-9	0.240	9-9	0.240
1959	1959	1959	1969	1969	1959	1959	1964	1964	1964	1964	1964	1964	1964	1964
MAXIMUMS FOR PERIOD OF RECORD														
	7-26	0.160	7-26	0.130	7-26	0.170	7-26	0.210	9-9	0.240	9-9	0.240	9-9	0.240
1959	1959	1959	1969	1969	1959	1959	1964	1964	1964	1964	1964	1964	1964	1964

NOTES: Watershed Conditions: 55% of area is woodland and desert shrubs (whitethorn, creosotebush, tarbush and sertonia), with a 25% crown spread cover. 45% of area supports grass (black grama, curly mesquite, tobosa, blue grama and sideots grama), with a basal area of 2.5%, and a shrub cover of approximately 6% crown spread. For topographic, geological and vegetation maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: records began January 1954. Monthly totals are Thiessen weighted averages from 69 gages, station averages are for 4 yr only (1968-71). Runoff Data: Records began July 1959, station averages are based on 1966, 1968-71 data. Temperature Data: See table of daily maximum and minimum value included for watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

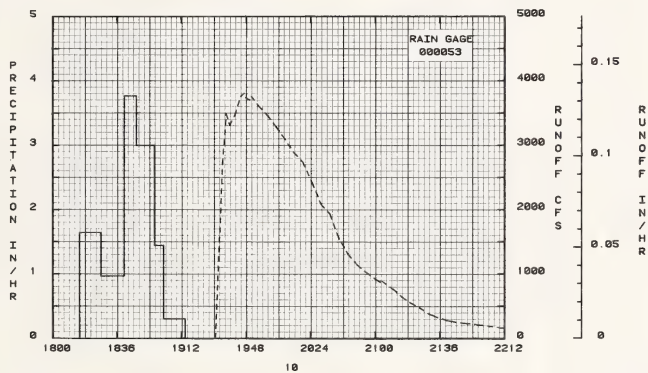
1971 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.00	0.0	0.0	0.0		
2	0.012	0.0	0.0	0.0	0.0	0.0	0.142	0.0	0.142	0.0	0.0	0.0		
3	0.022	0.0	0.0	0.0	0.0	0.0	0.02	0.182	0.04	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.072	0.0	0.0	0.595	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.012	0.0	0.0	0.0	0.055	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.152	0.0	0.0	0.085	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.142	0.102	0.0	0.0	0.0	0.125	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.002	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.122	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.142	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.79	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.252	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.152	0.0	0.0	0.0	0.0	0.022	
15	0.0	0.0	0.0	0.0052	0.0	0.0	0.0	0.01	0.0	0.012	0.022	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.142	0.03	0.00	0.012	0.142	0.0	0.0	
17	0.0	0.002	0.0	0.0	0.0	0.0	0.022	0.0	0.00	0.352	0.0	0.0	0.0	
18	0.0	0.042	0.0205	0.0	0.0	0.0	0.282	1.172	0.732	0.00	0.0	0.0	0.172	
19	0.0	0.00	0.212	0.0	0.03	0.0	0.03	0.00	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.102	0.0	0.0	0.0	0.0	0.02	0.192	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.032	0.0	0.0	0.0	0.0	0.15	0.082	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	1.082	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.012	0.0	0.0	0.322	0.452	0.452	0.452	0.452	0.632	0.0	0.0	0.0	
25	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.142	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.232	0.0	0.00	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.302	0.152	0.0	0.0	0.0	0.0	0.00	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.592	0.0	0.0	0.0	0.02	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.01	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.00	0.0	0.0	0.0	0.0	0.202	
TOTAL	0.03	0.25	0.0	0.45	0.00	0.32	3.09	5.07	1.62	1.51	0.17	1.48		
STA AV	0.27	0.62	0.69	0.25	0.11	0.10	3.19	4.07	1.19	0.44	0.26	0.73		

NOTES: Data are Thiessen weighted averages of values from 69 gages. STA AV are for 4 yr only (1968-71).



1971      SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date No-Day	Rainfall (inches)	Runoff (inches)	Date No-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date No-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST      10 - 11, 1971 (CONTINUED)											
							8-10	2130	373.198	0.1421	
								2135	318.178	0.1431	
								2140	272.738	0.1440	
								2145	267.500	0.1448	
								2150	227.602	0.1455	
								2200	197.759	0.1468	
								2215	153.008	0.1483	
								2230	123.350	0.1495	
								2300	79.818	0.1513	
								2331	51.378	0.1525	
							8-11	2400	33.610	0.1532	
								30	21.138	0.1537	
								100	13.588	0.1540	
								130	9.138	0.1542	
								202	6.192	0.1543	
								259	3.593	0.1545	
								459	1.828	0.1547	
								850	0.680	0.1549	
								1149	0.357	0.1550	
								2400	0.075	0.1551	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.



EVENT OF AUGUST 10 - 11, 1971  
TOMBSTONE, ARIZONA WATERSHED W-2

## TOMBSTONE, ARIZONA WATERSHED W-3

LOCATION: Cochise County; 1.3 miles north of Tombstone; tributary of Walnut Gulch; San Pedro River, Gila River, Colorado River Basin.

AREA: 2220.00 acres 3.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												TOMBSTONE, ARIZONA WATERSHED W-3											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971	P 0.02	0.28	0.0	0.36	0.0	0.13	3.06	4.93	1.55	1.66	0.18	1.37	13.53										
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.091	0.497	0.012	0.0	0.0	0.0	0.599										
STA AV	P 0.50	0.39	0.44	0.16	0.08	0.21	3.42	3.18	1.33	0.50	0.40	0.79	11.41										
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.028	0.125	0.028	0.0	0.0	0.0	0.180										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge				1 Hour				2 Hours				Maximum Volume for Selected time interval				6 Hours				12 Hours			
Date	Date	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	8-10	0.468	8-10	0.275	8-10	0.312	8-11	0.320	8-11	0.320	8-11	0.320	8-11	0.320	8-11	0.320	8-10	0.320	8-10	0.320	8-10	0.426	
MAXIMUMS FOR PERIOD OF RECORD																							
1958	8-16	0.580	8-10	0.275	8-10	0.312	8-11	0.320	8-11	0.320	8-11	0.320	8-11	0.320	8-10	0.320	8-10	0.320	8-10	0.320	8-10	0.426	

NOTES: Watershed conditions: Vegetative cover: Desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread approximately 30% and grasses with basal area of approximately 0.5% cover occupy 55% of the area. Grasses (Black grass, curly mesquite, tobosa) with basal area of 7.5% cover and shrub cover of 2% occupy the remaining 45% of the area. For topography, geologic and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. No. 1226. Precipitation Data: Records began 1955. Monthly totals are Thiessen weighted averages of 13 gages, station averages are based on record period (1955-71). Runoff Data: Records began 1958, station averages are based on record period (1958-71). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1971 DAILY PRECIPITATION (inches)												TOMBSTONE, ARIZONA WATERSHED W-3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.01	0.0	0.0	0.0											
2	0.01E	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.10E	0.0	0.0	0.0											
3	0.00E	0.0	0.0	0.0	0.0	0.0	0.00	0.11	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.56E											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.05E											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.08E	0.0	0.0	0.11E											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.14	1.31	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.11E	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24E											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.02E											
15	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.01	0.0	0.0	0.04E											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.00	0.0	0.00	0.13E											
17	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.00E	0.0											
18	0.0	0.05E	0.0	0.18E	0.0	0.0	0.0	0.07E	1.08	0.88E	0.0	0.18E											
19	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0											
20	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0											
21	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.12	0.26E	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12E	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.67E	0.43	0.0	0.04E	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.32	0.0	0.01	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.02	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.47E	0.0	0.01											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.01											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.20											
TOTAL	0.02	0.28	0.0	0.36	0.0	0.13	3.06	4.93	1.55	1.66	0.18	1.37											
STA AV	0.50	0.39	0.44	0.16	0.08	0.21	3.42	3.18	1.33	0.50	0.40	0.79											

NOTES: Data are Thiessen weighted averages from 13 rain gages. STA AV are based on record period (1955-71).

1971 MEAN DAILY DISCHARGE (cfs)												TOMBSTONE, ARIZONA WATERSHED W-3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.850E	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001E	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.819E	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000E	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.596E	1.081E	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002E	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.551	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.919E	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2732	1.4950	0.0361	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.091	0.497	0.012	0.0	0.0											
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028	0.125	0.028	0.0	0.0											

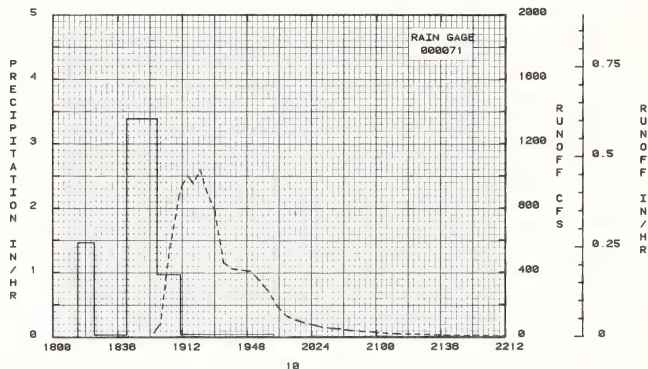
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.070722. STA AV based on record period (1958-71).

1971 SELECTED RUNOFF EVENT												TOMBSTONE, ARIZONA WATERSHED W-3											
ANTERECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF AUGUST 10 - 11, 1971																							
8-10	0.0	0.0	8-10	1814	0.0	0.0	8-10	1853	0.0	0.0													
				1823	1.4666	0.22		1855	0.437	0.0													
				1841	0.0333	0.23		1857	40.026	0.0003													
				1858	3.3882	1.19		1900	84.969	0.0017													
				1911	0.9693	1.40		1903	369.830	0.0065													
WATERSHED CONDITIONS:																							
Vegetative Cover: Desert shrubs (whitethorn, creosote-bush, and tarbrush) with a crown spread approximately 30% and grasses with basal area of approximately 0.5% cover, occupy 55% of the area.																							
Grasses (black grass, curly mesquite, tobosa) with a basal area of 2.6% cover and shrub cover of 2% occupy the remaining 45% of the area.																							
			2003	0.0346	1.43		1905	551.339	0.0137														
							1908	733.284	0.0263														
							1910	864.261	0.0395														
							1912	942.752	0.0537														
							1915	1000.000	0.0757														
							1918	952.187	0.0961														
							1922	1039.115	0.1256														
							1925	919.350	0.1478														
							1930	780.187	0.1804														
							1935	459.198	0.2031														
							1940	421.408	0.2192														
							1950	406.069	0.2502														
							1955	348.043	0.2640														
							2000	279.875	0.2761														
							2005	185.568	0.2846														
							2010	128.754	0.2904														
							2015	102.756	0.2948														
							2020	84.969	0.2982														
							2025	72.283	0.3011														
							2030	58.129	0.3036														
							2035	50.443	0.3056														
							2040	48.014	0.3074														
							2045	38.950	0.3091														
							2051	32.830	0.3107														
							2101	23.891	0.3128														

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.

1971 SELECTED RUNOFF EVENT						TONBESTONE, ARIZONA WATERSHED W-3					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 10 - 11, 1971 (CONTINUED)											
							8-10	2111	17.805	0.3143	
							2141	8.438	0.3172		
							2211	4.157	0.3186		
							2242	1.852	0.3193		
							2346	0.261	0.3198		
							2400	0.047	0.3198		
							52	0.0	0.3198		
							8-11				

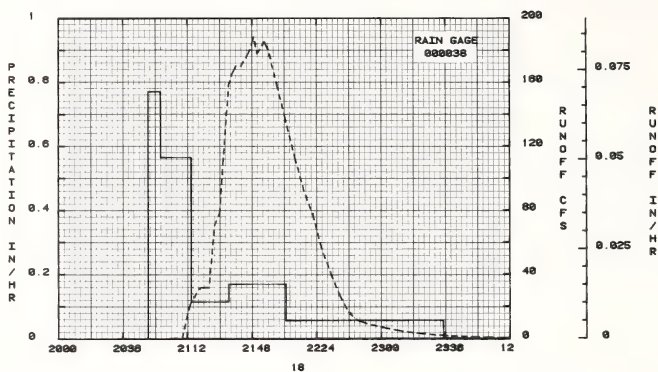
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



EVENT OF AUGUST 10 - 11, 1971  
TONBESTONE, ARIZONA WATERSHED W-3

1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA WATERSHED W-3					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 18 - 19, 1971											
RG 000038			RG 000038								
8-18	0.53	0.0	8-18	2050	0.0	0.0	8-18	2102	0.0	0.0	
				2057	0.7714	0.09		2106	0.161	0.0	
				2114	0.5647	0.25		2109	0.217	0.0	
				2135	0.1143	0.29		2112	15.098	0.0002	
				2207	0.1688	0.38		2114	23.083	0.0005	
WATERSHED CONDITIONS:				2302	0.0545	0.43		2117	26.166	0.0011	
Vegetative cover: Desert				2335	0.0545	0.46		2119	31.866	0.0016	
shrubs (whitethorn, creosote-								2124	31.866	0.0028	
bush, and tarbrush) with								2127	70.791	0.0040	
a crown spread approximately								2130	78.422	0.0057	
30% and grasses with basal											
area of approximately 0.8%								2132	112.367	0.0070	
cover, occupy 55% of the area.								2135	158.084	0.0101	
Grasses (black grama, curly								2137	165.335	0.0124	
sagequite, tobosa) with a								2139	170.271	0.0150	
basal area of 2.6% cover								2142	170.271	0.0189	
and shrub cover of 2% occupy											
the remaining 45% of the								2147	180.387	0.0253	
area.								2149	188.190	0.0282	
								2151	177.827	0.0308	
								2155	185.568	0.0362	
								2157	180.387	0.0391	
								2202	158.084	0.0453	
								2207	135.224	0.0507	
								2212	112.367	0.0555	
								2217	91.856	0.0592	
								2222	76.862	0.0623	
								2227	55.500	0.0648	
								2232	40.026	0.0666	
								2237	26.410	0.0678	
								2242	15.751	0.0686	
								2247	10.952	0.0691	
								2252	8.911	0.0695	
								2302	6.284	0.0701	
								2312	4.157	0.0705	
								2322	2.750	0.0708	
								2337	1.306	0.0710	
								2352	0.530	0.0711	
								2400	0.281	0.0711	
							8-19	7	0.115	0.0711	
								25	0.0	0.0711	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



EVENT OF AUGUST 18 - 19, 1971  
TOMBSTONE, ARIZONA WATERSHED W-3

## TOMBSTONE, ARIZONA W-4

LOCATION: Cochise County, Arizona; 2 miles north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 560.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-4					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1971	P 0.01	0.30	0.0	0.39	0.0	0.16	3.57	5.16	1.68	1.69	0.17	1.42	14.54					
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.284	0.081	0.051	0.0	0.0	0.0	1.175					
STA AV	P 0.46	0.38	0.46	0.16	0.08	0.23	3.35	3.23	1.35	0.50	0.39	0.77	11.37					
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.371	0.164	0.030	0.0	0.0	0.0	0.566					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																		
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	8-10	0.711	8-10	0.372	8-10	0.386	8-10	0.386	8-10	0.386	8-9	0.386	8-8	0.391	8-5	0.665		
MAXIMUMS FOR PERIOD OF RECORD																		
	7-19	2.250	7-19	0.980	7-19	1.100	7-19	1.100	7-19	1.100	7-19	1.630	7-19	1.630	7-19	4.370		
	1955		1955		1955		1955		1955		1955		1955		1955			

NOTES: Watershed conditions: Vegetative cover: 100% dominated by desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread of approximately 38% and an understory of grasses with approximately 0.6% basal cover. For topography, geological, and vegetative maps, see pages 63.1-3, 63.1-4 and 63.1-5 respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Record began July 1954. Monthly totals are Thiessen weighted averages of three rain gages, station averages are based on record period (1955-71). Runoff Data: Records began January 1955, station averages based on 15 yr (1955-58) and (1961-71). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1971 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-4						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec							
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.01	0.0	0.0	0.0							
2	0.01	0.0	0.0	0.0	0.0	0.0	0.128	0.0	0.118	0.0	0.0	0.0							
3	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0							
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.575							
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.055							
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0							
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.07E	0.0	0.0	0.11E							
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
10	0.0	0.0	0.0	0.0	0.0	0.0	0.22	1.45	0.0	0.0	0.0	0.0							
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0							
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.0							
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28E							
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.01E							
15	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.01	0.0	0.0	0.04E	0.0							
16	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.00	0.13E	0.0							
17	0.0	0.16	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.42	0.0	0.0							
18	0.0	0.03	0.0	0.21E	0.0	0.0	0.07	1.11	0.94E	0.0	0.0	0.20							
19	0.0	0.0	0.0	0.14E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0							
20	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0							
21	0.0	0.04	0.0	0.0	0.0	0.0	0.15	0.35	0.0	0.0	0.0	0.0							
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
23	0.0	0.0	0.0	0.0	0.0	0.0	1.35E	0.0	0.0	0.0	0.0	0.0							
24	0.0	0.0	0.0	0.0	0.0	0.0	0.71E	0.36	0.0	0.63	0.0	0.0							
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.20	0.0	0.0							
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01							
27	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.29	0.0	0.01	0.0	0.0							
28	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0	0.0	0.0							
29	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.56E	0.0	0.0	0.01							
30	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0							
31	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.20							
TOTAL	0.01	0.30	0.0	0.39	0.0	0.16	3.57	5.16	1.68	1.69	0.17	1.42							
STA AV	0.46	0.38	0.46	0.16	0.08	0.23	3.35	3.23	1.35	0.50	0.39	0.77							

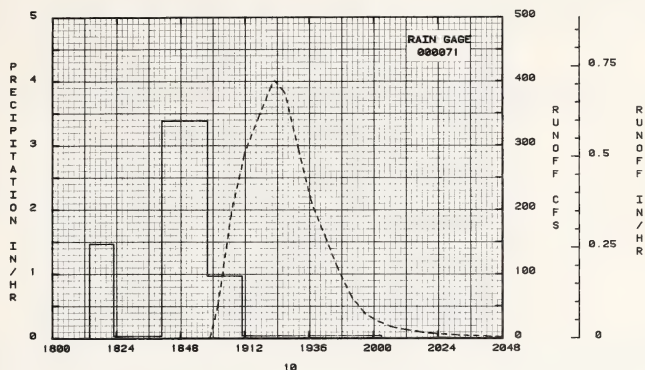
NOTES: Data are Thiessen weighted averages of values from three gages. STA AV are for record period (1955-71).

1971 MEAN DAILY DISCHARGE (cfs)												TOMBSTONE, ARIZONA W-4											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.046	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.106	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.087	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.457E	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.076	1.195E	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.493	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.185	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2154	0.0398	0.0	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.284	0.841	0.051	0.0	0.0											
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.371	0.164	0.030	0.0	0.0											

NOTES: To convert mean daily discharge in CFS to IN/DAT, multiply by 0.042503. STA AV based on record period (1955-58) and (1961-71).

1971 SELECTED RUNOFF EVENT												TOMBSTONE, ARIZONA W-4											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)		No-Day	of Day	(cfs)	(inches)								
EVENT OF AUGUST 10 - 11, 1971																							
RG 000071												RG 000071											
8-10	0.0	0.0	8-10	1814	0.0	0.0	8-10	1854	0.0	0.0		8-10	1854	0.0	0.0								
				1823	1.4666	0.22		1857	0.275	0.0			1857	0.275	0.0								
				1841	0.0333	0.23		1859	0.692	0.0			1859	0.692	0.0								
				1858	3.3882	1.19		1902	51.396	0.0023			1902	51.396	0.0023								
				1911	0.9693	1.40		1907	197.041	0.0203			1907	197.041	0.0203								
WATERSHED CONDITIONS:																							
100% of area dominated by desert shrubs (whitethorn, creosotebush and tarbush) with a crown spread of approximately 33% and an understory of grasses with approximately 0.6% basal cover.																							
			2003	0.0386	1.43			1912	289.415	0.0573			1912	289.415	0.0573								
								1917	383.489	0.1033			1917	383.489	0.1033								
								1922	394.602	0.1569			1922	394.602	0.1569								
								1923	401.414	0.1707			1923	401.414	0.1707								
								1927	381.126	0.2167			1927	381.126	0.2167								
								1932	293.896	0.2657			1932	293.896	0.2657								
								1937	209.874	0.3023			1937	209.874	0.3023								
								1942	158.288	0.3303			1942	158.288	0.3303								
								1947	105.096	0.3494			1947	105.096	0.3494								
								1952	62.674	0.3616			1952	62.674	0.3616								
								1957	37.266	0.3692			1957	37.266	0.3692								
								2002	25.390	0.3738			2002	25.390	0.3738								
								2007	17.168	0.3769			2007	17.168	0.3769								
								2012	12.982	0.3792			2012	12.982	0.3792								
								2017	9.533	0.3808			2017	9.533	0.3808								
								2022	7.000	0.3820			2022	7.000	0.3820								
								2032	4.494	0.3837			2032	4.494	0.3837								
								2042	2.818	0.3848			2042	2.818	0.3848								
								2052	1.342	0.3854			2052	1.342	0.3854								
								2107	0.588	0.3858			2107	0.588	0.3858								
								2127	0.143	0.3860			2127	0.143	0.3860								
								2139	0.029	0.3860			2139	0.029	0.3860								
								2159	0.0	0.3860			2159	0.0	0.3860								

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001771.



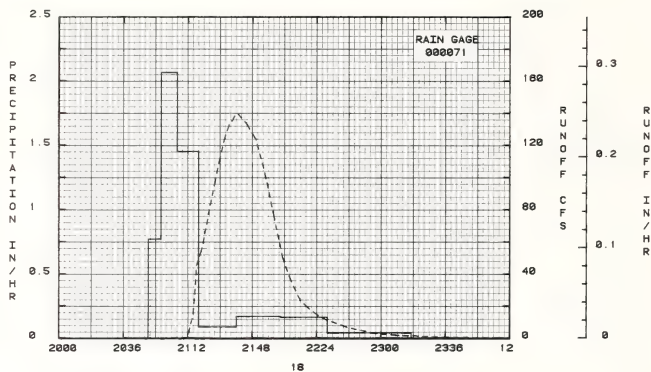
EVENT OF AUGUST 10 - 11, 1971  
TOMBSTONE, ARIZONA W-4

1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-4					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 18 - 19, 1971											
RG 000071			RG 000071								
8-18	0.24	0.0	8-18	2050	0.0	0.0	8-18	2058	0.0	0.0	
				2057	0.7718	0.09		2110	0.275	0.0	
				2106	2.0667	0.40		2112	0.359	0.0	
				2118	1.4500	0.69		2115	15.446	0.0007	
				2139	0.0857	0.72		2117	45.416	0.0024	
WATERSHED CONDITIONS:											
100% of area dominated by											
desert shrubs (whitethorn,											
creosotebush and tarbush)											
with a crown spread of											
approximately 33% and an											
understory of grasses with											
approximately 0.6% basal											
cover.											
				2204	0.1680	0.79		2120	56.230	0.0070	
				2230	0.1615	0.86		2123	73.969	0.0129	
				2317	0.0383	0.89		2125	85.931	0.0173	
								2127	96.816	0.0230	
								2130	112.988	0.0324	
								2133	126.324	0.0423	
								2135	132.689	0.0504	
								2137	135.921	0.0578	
								2138	138.094	0.0625	
								2140	139.186	0.0702	
								2145	132.689	0.0909	
								2150	123.191	0.1095	
								2155	102.198	0.1259	
								2200	76.309	0.1395	
								2205	50.044	0.1487	
								2210	38.078	0.1549	
								2215	23.321	0.1593	
								2220	18.051	0.1623	
								2225	13.787	0.1646	
								2230	11.040	0.1665	
								2241	6.660	0.1693	
								2255	3.122	0.1713	
								2310	1.546	0.1723	
								2338	0.275	0.1731	
								2400	0.057	0.1732	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001771.

1971 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-4							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 18 - 19, 1971 (CONTINUED)							8-19	5	0.012	0.1732
							18	18	0.0	0.1732

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001771.



EVENT OF AUGUST 18 - 19, 1971  
TOMBSTONE, ARIZONA W-4

## TOMBSTONE, ARIZONA W-6

LOCATION: Cochise County; 3/4 mile north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 23500.00 acres 36.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971	P 0.03	0.24	0.0	0.46	0.00	0.36	3.14	5.01	1.63	1.49	0.17	1.44	13.98	
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.053	0.321	0.008	0.0	0.0	0.0	0.382	
STA AV	P 0.27	0.63	0.68	0.26	0.11	0.11	3.24	4.09	1.17	0.43	0.26	0.74	11.95	
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.113	0.008	0.0	0.0	0.0	0.177	
ANNUAL MAXIMUM DISCHARGE (in/hc) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days	
	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	8-10	0.152	8-10	0.119	8-10	0.155	8-10	0.176	8-10	0.176	8-11	0.176	8-10	0.176
	8-10	0.152	8-10	0.119	8-10	0.155	8-10	0.176	8-10	0.176	8-11	0.176	8-10	0.176
1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971
MAXIMUMS FOR PERIOD OF RECORD														
	8-10	0.152	8-10	0.119	8-10	0.155	8-10	0.176	8-10	0.176	8-11	0.176	8-10	0.176
1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971

NOTES: Watershed conditions: Vegetative cover: Black woodland and desert shrubs (whitehorn, creosotebush, tarbush, 00 montania) occupy approximately 45% of area, with a crown spread of 25% cover. The remaining 55% of the area supports 769320 a grass cover (black grass, curly mesquite, tobosa, blue grama, and sidecoats grama) with a basal area of 2.5x co559000 and a shrub cover of approximately 6% crown spread. For topographic, geologic and vegetative maps, see pages 63 103 0 63.1-4, and 63.1-5, respectively, of Hydrologic Data for Environmental Agricultural Watersheds in the United States; 000 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1962. Monthly totals are Thiessen weighted averages of values from 57 gages, station averages are based on 1968-1971 record period. Runoff Data: Records began 000000 1962, station averages based on 5 yr of data (1966, 1968-71). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service 000000 records at Tombstone, Arizona. 000000

1971 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.00	0.0	0.0	0.0		
2	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0		
3	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.18E	0.05	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.59E		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.01	0.0	0.0		0.05E
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.0		0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0		0.01E
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.10E	0.0	0.0	0.0		0.12E
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.01E
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27E	0.0	0.0	0.0	0.0		0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.14E	0.0	0.0		0.0
12	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.73	0.0	0.0	0.0	0.0		0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.25E
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0		0.02E
15	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.01	0.0	0.01E	0.02	0.0		0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.03	0.00	0.00E	0.15E	0.0		0.0
17	0.0	0.06E	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.34E	0.0	0.0		0.0
18	0.0	0.04E	0.0	0.20E	0.0	0.0	0.33E	1.18E	0.73E	0.00	0.0	0.17E		0.0
19	0.0	0.00	0.0	0.22E	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0		0.0
20	0.0	0.10E	0.0	0.0	0.0	0.0	0.02	0.18E	0.0	0.0	0.0	0.0		0.0
21	0.0	0.03E	0.0	0.0	0.0	0.0	0.18	0.05E	0.0	0.0	0.0	0.0		0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0		0.0
24	0.0	0.01E	0.0	0.0	0.0	0.36E	0.41E	0.41E	0.0	0.63E	0.0	0.0		0.0
25	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0		0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02		0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.22E	0.0	0.00	0.0	0.0		0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.34E	0.18E	0.0	0.0	0.0	0.00		0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.60E	0.0	0.0	0.02		0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.01	0.0		0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.20E		0.0
TOTAL	0.03	0.24	0.0	0.46	0.00	0.36	3.14	5.01	1.63	1.49	0.17	1.44		
STA AV	0.27	0.63	0.68	0.26	0.11	0.11	3.24	4.09	1.17	0.43	0.26	0.74		

NOTES: Daily precipitation are Thiessen weighted averages of values from 57 gages. STA AV based on 4 yr only 000000 (1968-71). 000000

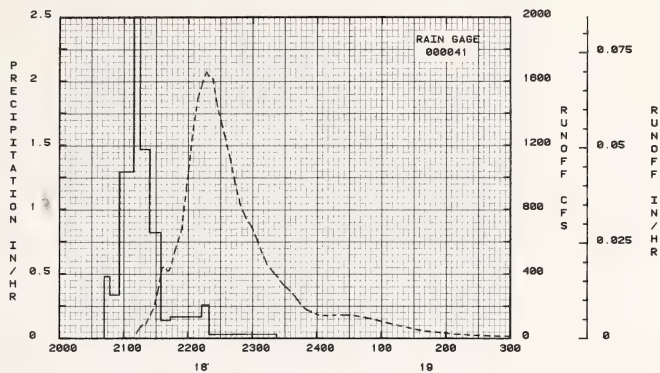




1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-6					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)			
EVENT OF AUGUST 18 - 19, 1971											
RG 000041			RG 000041								
8-18	0.16	0.010	8-18	2042	0.0	8-18	2055	0.029	0.0		
				2047	0.4800		2103	1.347	0.0		
				2056	0.3333		2108	1.994	0.0		
				2109	1.2923		2110	2.506	0.0		
				2115	2.4998		2113	41.242	0.0		
WATERSHED CONDITIONS:											
Vegetative cover: Oak											
woodland and desert shrubs											
(whitethorn, creosotebush,											
tarbush, matornia) occupy											
approximately 45% of the											
area, with a crown spread											
of 25% cover. The remaining											
55% of the area supports a											
grass cover (black grama,											
curly mesquite, tobosna, blue											
grass, and sidecoats grass)											
with a basal area of 2.5%											
cover and shrub cover of 6%											
crown spread.											
				2124	1.4667		2118	88.183	0.0002		
				2135	0.8182		2121	88.510	0.0004		
				2144	0.1333		2123	120.000	0.0006		
				2213	0.1655		2128	180.161	0.0011		
				2220	0.2571		2133	321.158	0.0020		
				2242	0.0273		2136	437.810	0.0028		
				2323	0.0293		2137	441.229	0.0031		
							2140	427.594	0.0040		
							2141	417.450	0.0043		
							2142	417.450	0.0046		
							2144	437.810	0.0052		
							2148	544.647	0.0066		
							2154	672.227	0.0092		
							2159	957.999	0.0120		
							2204	1264.792	0.0160		
							2209	1895.386	0.0208		
							2214	1603.258	0.0262		
							2217	1658.691	0.0297		
							2219	1630.852	0.0321		
							2223	1612.427	0.0366		
							2227	1442.945	0.0409		
							2231	1337.927	0.0448		
							2234	1258.763	0.0476		
							2239	1117.258	0.0517		
							2244	951.469	0.0553		
							2249	822.530	0.0585		
							2254	742.500	0.0612		
							2259	695.267	0.0637		
							2304	616.305	0.0661		
							2309	529.990	0.0681		
							2314	455.000	0.0698		
							2319	414.086	0.0714		
							2324	377.646	0.0728		
							2329	331.185	0.0740		
							2335	294.968	0.0753		
							2340	257.190	0.0763		
							2345	212.363	0.0772		
							2350	177.574	0.0779		
							2355	162.331	0.0785		
							2400	147.149	0.0791		
							8-19	2	141.521	0.0793	
							6	136.744	0.0797		
							15	141.521	0.0806		
							18	144.323	0.0809		
							31	144.323	0.0822		
							35	138.744	0.0826		
							46	125.231	0.0836		
							56	110.455	0.0844		
							106	93.000	0.0851		
							137	46.903	0.0866		
							209	24.030	0.0874		
							237	15.012	0.0878		
							308	9.705	0.0881		
							338	6.097	0.0883		
							410	3.731	0.0884		
							516	1.347	0.0885		
							612	0.573	0.0885		
							810	0.143	0.0885		
							948	0.002	0.0885		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.

000000



EVENT OF AUGUST 18 - 19, 1971  
TOMBSTONE, ARIZONA W-6

## TOMBSTONE, ARIZONA W-8

LOCATION: Cochise County; 1-1/2 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 3830.00 acres 5.98 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												TOMBSTONE, ARIZONA W-8											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1964														1964									
1971	P 0.02	0.27	0.0	0.51	0.0	0.20	2.49	5.31	1.64	1.52	0.18	1.48	13.62	Q 0.0	0.0	0.0	0.051	0.413	0.017	0.0	0.0	0.0	0.481
STA AV	P 0.25	0.68	0.62	0.25	0.10	0.07	2.53	4.31	1.27	0.45	0.27	0.74	11.54	Q 0.0	0.0	0.0	0.050	0.171	0.015	0.0	0.0	0.0	0.236

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												TOMBSTONE, ARIZONA W-8											
Maximum Discharge				Maximum Volume for Selected Time Interval				Maximum Discharge				Maximum Volume for Selected Time Interval				Maximum Discharge				Maximum Volume for Selected Time Interval			
Date	Rate	1 Hour	2 Hours	Date	Vol.	6 Hours	12 Hours	Date	Rate	1 Day	2 Days	Date	Vol.	6 Hours	12 Hours	Date	Rate	1 Day	2 Days	Date	Vol.	6 Hours	12 Hours
1971	8-10	0.332	8-10	0.130	8-10	0.148	8-11	0.152	8-11	0.152	8-11	0.152	8-10	0.152	8-10	0.152	8-10	0.152	8-10	0.152	8-10	0.285	
MAXIMUMS FOR PERIOD OF RECORD																							
	7-22	1.110	7-22	0.310	7-22	0.320	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340	

NOTES: Watershed conditions: Vegetative cover: approximately 33% of area is dominated by desert shrubs (white-thorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grass, curly mesquite, sidecoats grass) with a basal area of about 2.5% interspersed by desert shrubs with a crown spread of 5%. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 17 gages, station averages are based on 1968-71 data. Runoff Data: Records began 1963, station averages are based on 1966, 1968-71 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1971 DAILY PRECIPITATION (inches)												TOMBSTONE, ARIZONA W-8											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.01E	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.01E	0.0	0.0	0.0	0.0	0.0	0.02	0.16	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.05S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05S	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11S	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00S	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	1.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27E	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	
15	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.00	0.0	0.02E	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.00	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.34E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.07	0.0	0.13S	0.0	0.0	0.18E	1.47	0.93E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	
19	0.0	0.0	0.0	0.35S	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.09S	0.0	0.0	0.0	0.0	0.00	0.24E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.01	0.0	0.0	0.0	0.0	0.06	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.72E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.20E	0.55E	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.41	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.46E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	
TOTAL	0.02	0.27	0.0	0.51	0.0	0.20	2.49	5.31	1.64	1.52	0.18	1.48											
STA AV	0.25	0.68	0.62	0.25	0.10	0.07	2.53	4.31	1.27	0.45	0.27	0.74											

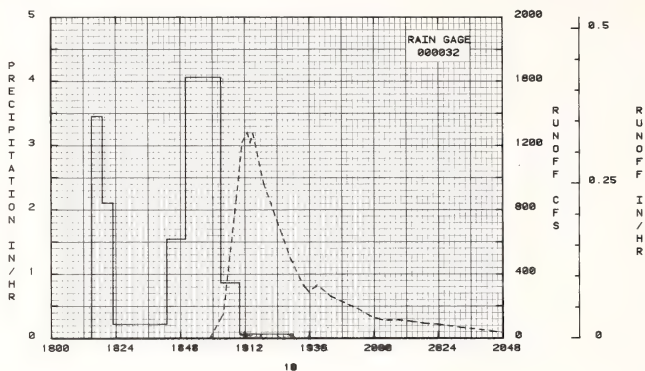
NOTES: Data are Thiessen weighted averages from 17 rain gages. STA AV are based on 1968-71 data.

MEAN DAILY DISCHARGE (cfs)												TOMBSTONE, ARIZONA W-8			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.593E	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.340	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.474E	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.218E	2.770E	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.288E	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.453E	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.633E	4.228E	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.275E	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.673	2.182E	0.092E	0.0	0.0			
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.051	0.413	0.017	0.0	0.0			
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.171	0.015	0.0	0.0	0.0			

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.006215. STA AV are based on 5 yr only (1966, 1968-71).

1971 SELECTED RAINFALL EVENT						TOMBSTONE, ARIZONA W-8				
PRECEDENT CONDITIONS			RAINFALL			WMOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(acres)
EVENT OF AUGUST 10 - 11, 1971										
RG 000032			RG 000032							
8-10	0.0	0.0	8-10	1815	0.0	0.0	8-10	1859	0.0	0.0
				1919	3.4501	0.23			150.662	0.0017
				1823	2.1000	0.37		1909	891.032	0.0128
				1843	0.2100	0.44		1911	1220.271	0.0213
				1850	1.5428	0.62		1913	1282.542	0.0327
WATERSHED CONDITIONS:										
Vegetative cover: Approximately 33% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideots grass) with a basal area of about 2.5%, interspersed by desert shrubs with a crown spread of about 5%.			1903 4.0617 1.50			1914 1213.448 0.0377				
			1910 0.8571 1.60			1915 1275.544 0.0440				
			1930 0.0600 1.62			1919 962.392 0.0632				
						1924 729.002 0.0812				
						1929 496.344 0.0582				
						1934 322.693 0.1033				
						1936 286.013 0.1058				
						1939 331.198 0.1099				
						1944 259.271 0.1162				
						1949 220.335 0.1215				
						1954 182.044 0.1258				
						1959 135.000 0.1292				
						2003 112.919 0.1313				
						2005 110.335 0.1323				
						2009 112.919 0.1342				
						2014 102.814 0.1365				
						2019 91.028 0.1387				
						2024 84.395 0.1406				
						2034 62.754 0.1438				
						2044 43.664 0.1461				
						2054 34.000 0.1478				
						2104 26.365 0.1491				
						2114 21.226 0.1501				
						2124 16.560 0.15109				
						2134 12.221 0.1515				
						2204 4.275 0.1526				
						2234 0.608 0.1529				
						2300 0.0 0.1529				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.



EVENT OF AUGUST 10 - 11, 1971

TOMBSTONE, ARIZONA W-8

## 1971 SELECTED RUNOFF EVENT

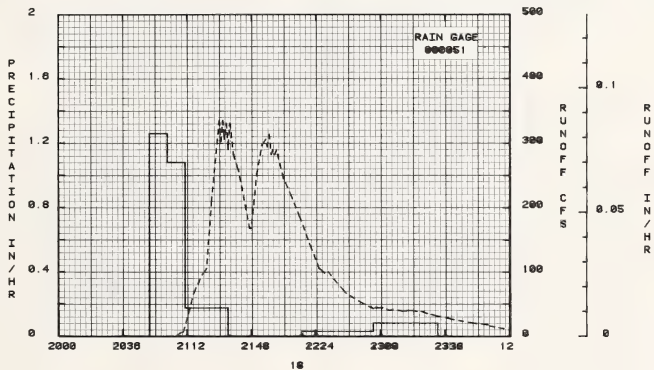
TOMBSTONE, ARIZONA W-8

ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 18 - 19, 1971										
8-18	RG 000051	0.059	8-18	RG 000051			8-18	2106	0.0	0.0
	0.82			2051	0.8	0.0		2109	6.067	0.0
				2101	1.2600	0.21		2110	6.567	0.0
				2111	1.0801	0.39		2113	36.015	0.0003
				2135	0.1750	0.46		2116	68.250	0.0010
				2216	0.0	0.46		2121	97.989	0.0028
				2256	0.0360	0.48		2123	105.283	0.0037
				2332	0.0833	0.53		2126	216.979	0.0057
								2130	335.500	0.0107
								2131	301.995	0.0120
								2132	335.500	0.0133
								2133	306.070	0.0146
								2134	331.190	0.0162
								2135	289.960	0.0175
								2136	331.198	0.0188
								2138	282.100	0.0216
								2141	255.579	0.0249
								2147	167.246	0.0305
								2148	167.346	0.0312
								2151	251.915	0.0340
								2154	297.950	0.0376
								2156	306.070	0.0400
								2157	293.939	0.0415
								2158	318.118	0.0427
								2159	282.100	0.0439
								2200	289.960	0.0453
								2201	282.100	0.0465
								2202	289.960	0.0477
								2206	248.692	0.0523
								2211	213.653	0.0572
								2216	179.046	0.0616
								2221	140.108	0.0650
								2226	105.283	0.0676
								2229	97.989	0.0689
								2231	100.383	0.0698

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.

1971 SELECTED RUNOFF EVENT					TOMBSTONE, ARIZONA W-8				
AFFECTING CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF AUGUST 18 - 19, 1971 (CONTINUED)									
							8-18	2236	82.255
								2241	66.385
								2251	49.515
								2256	42.953
								2257	44.379
								2259	43.664
								2300	44.379
								2301	44.379
								2305	40.138
								2307	41.539
								2312	39.443
								2316	40.138
								2317	40.138
								2320	38.750
								2323	38.750
								2326	35.340
								2331	31.855
								2341	25.703
								2351	20.610
								2400	17.903
							8-19	1	15.906
								16	10.000
								31	5.130
								46	2.490
								101	0.789
								125	0.0

NOTES: To convert runoff in CFS to IIR/HR, multiply by 0.000259.



EVENT OF AUGUST 18 - 19, 1971  
TOMBSTONE, ARIZONA W-8

## TOMBSTONE, ARIZONA W-11

LOCATION: Cochise County; 4-1/3 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 2035.00 acres 3.18 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-11																					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																					
1971	P	0.02	0.28	0.0	0.62	0.0	0.23	2.15	5.46	1.66	1.41	0.18	1.58	13.59																					
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.401	0.035	0.0	0.0	0.0	0.438																					
STA AV	P	0.27	0.66	0.62	0.29	0.11	0.08	2.49	4.44	1.21	0.43	0.29	0.77	11.66																					
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.096	0.195	0.022	0.0	0.0	0.0	0.314																					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																			
		Maximum Discharge		1 Hour				2 Hours				Maximum Volume for Selected Time Interval				6 Hours				12 Hours				1 Day				2 Days				8 Days			
		Date	Date	Date	Date	Vol.	Date	Date	Date	Date	Vol.	Date	Date	Date	Date	Vol.	Date	Date	Date	Date	Vol.	Date	Date	Date	Date	Vol.	Date	Date	Date	Vol.					
1971		8-18	0.211	8-18	0.099	8-18	0.106	8-18	0.107	8-18	0.173	8-18	0.173	8-18	0.173	8-17	0.173	8-17	0.173	8-12	0.251														
MAXIMUMS FOR PERIOD OF RECORD																																			
		9-11	0.520	9-10	0.620	9-9	0.750	9-9	0.770	9-9	0.970	9-9	0.970	9-10	1.460	9-8	1.700																		
		1964		1964		1964		1964		1964		1964		1964		1964																			

NOTES: Watershed conditions: Approximately 20% of the area dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with a basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grama, curly mesquite, sideoats grama) with a basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Res. Pub. 1226, p. 63.1-3. For geologic map (p. 63.1-4) and vegetation map (p. 63.1-5) of foregoing reference. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 10 rain gages, station averages are for 4 yr (1968-71). Runoff Data: Records began 1963. Station averages are based on 1966, 1968-71 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 61.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1971 DAILY PRECIPITATION (inches)											TOMBSTONE, ARIZONA W-11										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0									
2	0.00	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.09	0.0	0.0	0.0									
3	0.02E	0.0	0.0	0.0	0.0	0.0	0.03	0.18	0.01	0.0	0.0	0.0									
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0									
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.055									
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0									
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0									
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.19	0.0	0.0	0.11E									
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005									
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0									
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.13E	0.0	0.0									
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0									
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	1.69	0.67	0.0	0.0									
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.05E									
15	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.01	0.0	0.03E	0.02	0.0									
16	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.16	0.0									
17	0.0	0.09	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.29E	0.0	0.0									
18	0.0	0.10	0.09E	0.0	0.0	0.0	0.28	1.69	0.67	0.0	0.0	0.19E									
19	0.0	0.0	0.0	0.52E	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0									
20	0.0	0.105	0.0	0.0	0.0	0.0	0.01	0.32	0.0	0.0	0.0	0.0									
21	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.01	0.0	0.0	0.0	0.0									
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									
23	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0									
24	0.0	0.0	0.0	0.0	0.23	0.0	0.51	0.42E	0.0	0.65E	0.0	0.0									
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0									
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02									
27	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.38	0.0	0.0	0.0	0.0									
28	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.03	0.0	0.0	0.0	0.01									
29	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.49	0.0	0.0	0.03									
30	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0									
31	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.19E	0.0									
TOTAL	0.02	0.28	0.0	0.62	0.0	0.23	2.15	5.46	1.66	1.41	0.18	1.58									
STA AV	0.27	0.66	0.62	0.29	0.11	0.08	2.49	4.44	1.21	0.43	0.29	0.77									

NOTES: Data are Thiessen weighted averages of 10 rain gages. STA AV are for 4 yr only (1968-71).

1971 MEAN DAILY DISCHARGE (cfs)												TOMBSTONE, ARIZONA 8-11											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0																						
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9882	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.424	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7772	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0692	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8192	2.566	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0102	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.185	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.081	3.385	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.640	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.062	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0029	1.1063	0.1009	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.401	0.035	0.0	0.0											
STA 1V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.096	0.195	0.022	0.0	0.0											

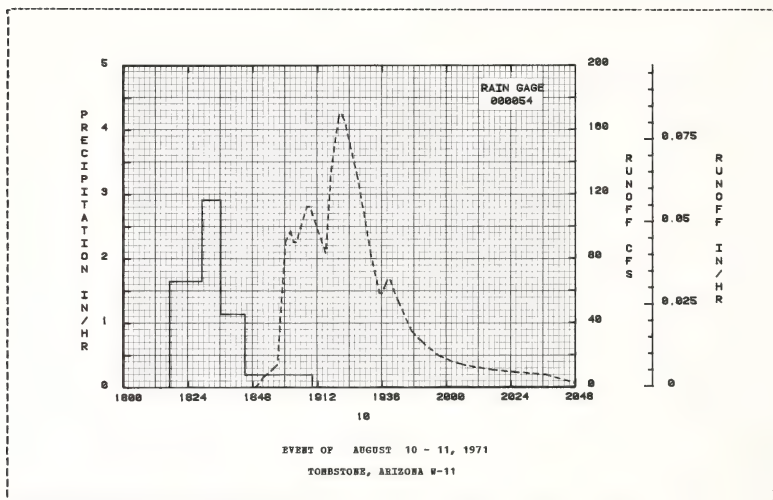
NOTES: To convert mean daily discharge values in CFS to IN/ DAY, multiply by 0.011696. STA 1V values are for 5 yr only (1966, 1968-71).

1971 SELECTED RUNOFF EVENTS												TOMBSTONE, ARIZONA 8-11											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF AUGUST 10 - 11, 1971																							
8-10	RG 000054	0.0	8-10	RG 000054	0.0	0.0	8-10	1849	0.0	0.0		1917	134.549	0.0155									
					1817	1.6500	0.33	1852	6.584	0.0001		1920	169.537	0.0193									
					1836	2.9142	0.67	1857	14.131	0.0005		1921	169.537	0.0206									
					1845	1.1313	0.84	1900	90.120	0.0018		1922	165.819	0.0219									
					1910	0.1920	0.92	1902	97.210	0.0032		1927	129.509	0.0281									
WATERSHED CONDITIONS:												1983	90.120	0.0039									
Vegetative cover: Approximately 20% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% cover and an understory of grasses with basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grama, curly mesquite, sideoats grama) with basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown cover.												1984	90.120	0.0048									
												1988	112.350	0.0081									
												1909	112.350	0.0090									
												1915	83.345	0.0138									
												1917	134.549	0.0155									
												1920	169.537	0.0193									
												1921	169.537	0.0206									
												1922	165.819	0.0219									
												1927	129.509	0.0281									
												1932	81.155	0.0323									
												1935	58.475	0.0340									
												1936	58.475	0.0344									
												1938	66.722	0.0355									
												1939	66.722	0.0360									
												1942	53.409	0.0375									
												1947	34.767	0.0393									
												1952	26.186	0.0405									
												1957	19.635	0.0415									
												2002	15.709	0.0422									
												2007	13.400	0.0428									
												2017	10.562	0.0438									
												2027	8.905	0.0446									
												2037	7.445	0.0453									
												2109	2.127	0.0465									

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000087.

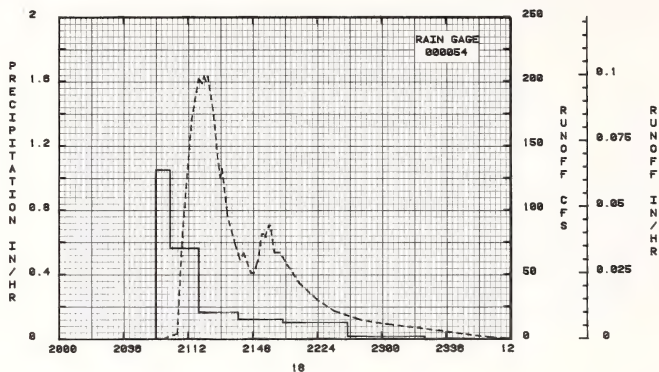
1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-11					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 10 - 11, 1971 (CONTINUED)											
							8-10	2138	0.374	0.0468	
								2207	0.032	0.0468	
							8-11	2225	0.0	0.0468	
								1525	0.0	0.0468	
								1526	16.333	0.0468	
								1532	15.709	0.0477	
								1535	15.099	0.0481	
								1540	14.131	0.0487	
								1545	13.037	0.0493	
								1550	11.609	0.0498	
								1600	8.905	0.0506	
								1610	6.300	0.0512	
								1620	2.127	0.0515	
								1632	1.308	0.0517	
								1640	0.709	0.0518	
								1650	0.214	0.0518	
								1702	0.032	0.0518	
								1712	0.0	0.0518	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000487.



1971 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA 8-11					
ATTACHED CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 18 - 19, 1971											
RG 000054			RG 000054								
8-18	1.45	0.107	8-18	2054	0.0	0.0	8-18	2054	0.0	0.0	
				2102	1.0580	0.14		2057	0.032	0.0	
				2118	0.5625	0.29		2059	0.288	0.0	
				2140	0.1636	0.35		2101	1.680	0.0	
				2205	0.1200	0.40		2106	0.900	0.0001	
WATERSHED CONDITIONS:											
Vegetative cover: Approximately 20% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% cover and an understory of grasses with basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grass, curly mesquite, sideoats grass) with basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown cover.				2241	0.1000	0.46		2109	83.345	0.0012	
				2324	0.0140	0.47		2114	165.537	0.0063	
								2118	202.098	0.0123	
								2120	198.180	0.0157	
								2121	204.065	0.0172	
								2122	200.136	0.0187	
								2123	204.065	0.0206	
								2126	177.045	0.0250	
								2129	134.549	0.0289	
								2130	124.570	0.0301	
								2131	132.016	0.0311	
								2134	94.812	0.0339	
								2139	65.650	0.0372	
								2141	61.136	0.0382	
								2143	66.722	0.0393	
								2147	51.000	0.0412	
								2149	51.000	0.0421	
								2151	61.136	0.0430	
								2153	81.155	0.0442	
								2154	81.155	0.0448	
								2155	79.000	0.0454	
								2157	87.827	0.0468	
								2158	87.827	0.0475	
								2200	66.722	0.0488	
								2203	66.722	0.0503	
								2214	43.257	0.0552	
								2225	28.862	0.0584	
								2234	21.042	0.0603	
								2249	14.131	0.0628	
								2304	10.508	0.0639	
								2334	5.798	0.0659	
								2400	1.000	0.0666	
							8-19	4	0.584	0.0666	
								32	0.061	0.0667	
								129	0.0	0.0667	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000487.



EVENT OF AUGUST 18 - 19, 1971  
TOMBSTONE, ARIZONA W-11

## TOMBSTONE, ARIZONA W-15

LOCATION: Cochise County; 3/4 miles east of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 5912.00 acres 9.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-15												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
P	0.06	0.27	0.0	0.52	0.0	0.36	3.40	4.79	1.70	1.52	0.17	1.53	14.32												
1971	Q	0.0	0.0	0.0	0.0	0.0	0.145	0.211	0.0	0.0	0.0	0.0	0.356												
STA AV	P	0.39	0.54	0.46	0.19	0.15	0.15	3.63	3.68	1.35	0.27	0.26	1.32	12.39											
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.041	0.145	0.017	0.0	0.0	0.203												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge												Maximum Volume for Selected Time Interval													
Date	Rate	1 Hour	2 Hours	4 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days	15 Days		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1971	8-10	0.211	8-10	0.144	8-10	0.180	8-10	0.194	8-11	0.194	8-11	0.194	8-10	0.194	8-10	0.194	8-5	0.211							
MAXIMUMS FOR PERIOD OF RECORD																									
8-10	0.211	8-10	0.144	8-10	0.180	8-19	0.200	8-19	0.200	8-19	0.230	8-19	0.250	8-19	0.250										
1971		1971		1971		1966		1966		1966		1966		1966											

NOTES: Watershed conditions: Vegetative cover: Desert shrubs (whitethorn, creosotebush, tarbush) occupy 78% of the area with a crown spread of approximately 30% and an understory of grasses of less than 1% basal area. 22% of the area is in grass cover (black grass, toboggan grass, blue grass, sideoats grass, and curly mesquite grass) of approximately 2% basal area. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began January 1965. Monthly totals Thiessen weighted averages of 15 rain gages. Runoff Data: Records began January 1965. Station averages for precipitation and runoff based on 1965-1971 record period. Temperature Data: For table of daily maximum and minimum values, see information included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

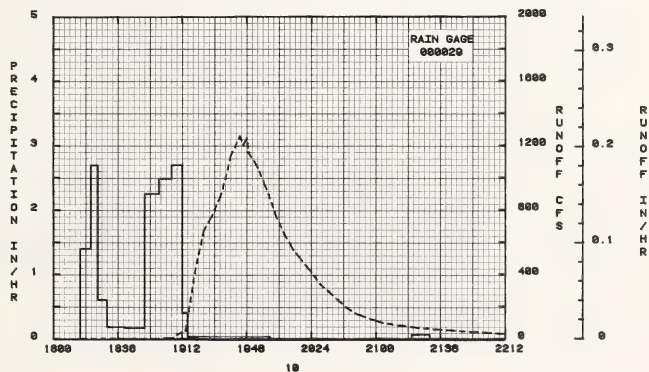
1971 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-15												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.222	0.00	0.0	0.0	0.0													
2	0.02	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.26	0.0	0.0	0.0													
3	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.10	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.04	0.0	0.0	0.155													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1.43	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.122	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.232													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.012													
15	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.02	0.0	0.018	0.01	0.0													
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.09	0.00	0.00	0.152	0.0												
17	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.452	0.0	0.0													
18	0.0	0.04	0.0	0.282	0.0	0.0	0.30	1.05	0.52	0.00	0.0	0.172													
19	0.0	0.00	0.0	0.172	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
20	0.0	0.145	0.0	0.0	0.0	0.0	0.0	0.00	0.02	0.0	0.0	0.0													
21	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.00	0.02	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.83	0.0	0.0	0.0	0.0													
24	0.0	0.012	0.0	0.0	0.0	0.0	0.352	0.29	0.32	0.0	0.662	0.0													
25	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.122	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.15	0.0	0.00	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.22	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.772	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.00	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.02	0.0	0.0	0.0	0.222													
TOTAL	0.06	0.27	0.0	0.52	0.0	0.36	3.40	4.79	1.70	1.52	0.17	1.53													
STA AV	0.39	0.54	0.46	0.19	0.15	0.15	3.63	3.68	1.35	0.27	0.26	1.32													

NOTES: Data are Thiessen weighted averages of 15 rain gages. STA AV are based on 7 yr record period (1965-71).



1971 SELECTED RUNOFF EVENT					TOMBSTONE, ARIZONA W-15				
ANTECEDENT CONDITIONS			RAINFALL		RUNOFF				
Date	Rainfall	Runoff	Date	Intensity	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	(in/hr)	No-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 10 - 11, 1971 (CONTINUED)									
			8-10		2044		188.010	0.1704	
					2049		151.851	0.1728	
					2054		131.706	0.1748	
					2059		113.135	0.1765	
					2104		96.113	0.1780	
					2114		78.782	0.1804	
					2124		64.961	0.1824	
					2134		55.558	0.1861	
					2144		48.340	0.1855	
					2154		40.405	0.1868	
					2204		34.390	0.1879	
					2219		27.872	0.1892	
					2234		22.102	0.1902	
					2304		13.408	0.1917	
					2334		7.994	0.1926	
					2400		5.620	0.1931	
			8-11		N		4.800	0.1932	
					105		1.534	0.1937	
					204		0.462	0.1939	
					314		0.059	0.1940	
					414		0.0	0.1940	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000168.



EVENT OF AUGUST 10 - 11, 1971  
TOMBSTONE, ARIZONA W-15

## SANTA ROSA, NEW MEXICO WATERSHED W-1

LOCATION: Guadalupe and Quay Counties; 30 miles east of Santa Rosa; Alamogordo Creek, Tributary of Pecos River.

AREA: 42880.00 acres 67.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SANTA ROSA, NEW MEXICO WATERSHED W-1											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	0.13	0.23	0.10	0.33	0.38	0.50	1.82	2.97	1.58	1.31	1.04	0.60	11.00											
	Q	0.0	0.0	0.0	0.0	0.000	0.0	0.003	0.090	0.001	0.004	0.0	0.0	0.099											
STA AV	P	0.21	0.19	0.31	0.59	1.12	1.54	3.15	2.39	1.48	1.36	0.92	0.28	13.05											
	Q	0.0	0.0	0.0	0.0	0.028	0.017	0.040	0.035	0.035	0.005	0.0	0.0	0.160											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days							
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.						
1971		8-8	0.024	8-8	0.024	8-8	0.045	8-8	0.071	8-8	0.075	8-8	0.076	8-7	0.088	8-3	0.089								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-29	0.034	5-29	0.031	5-29	0.053	5-29	0.096	5-29	0.108	5-29	0.110	6-1	0.110	6-5	0.122								
		1969		1969		1969		1969		1969		1969		1969		1969									

NOTES: Watershed conditions: Grazing land, about 75% of the area is grassland, vegetation consisting of blue grama, gallego, buffalo and ring shrub. Remaining 25% of area is piñon, juniper, and various shrubs, with some grasses interspersed. Monthly precipitation values are Thiessen weighted averages of 49 rain gages. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 64.001-1. Precipitation and runoff records began in 1955. STA AV based on 4 yr (1965-71), previously published data are being reevaluated. For long-time precipitation records, see National Weather Service records at Santa Rosa, New Mexico.

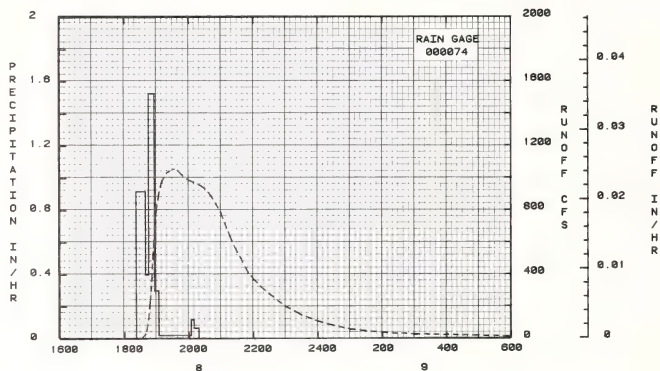
1971 DAILY PRECIPITATION (inches)													SANTA ROSA, NEW MEXICO WATERSHED W-1												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	1	0.0	0.0	0.000	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.228												
2	2	0.0	0.0	0.105	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.078												
3	3	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.03	0.0	0.0	0.0												
4	4	0.055	0.0	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0	0.0	0.0												
5	5	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.552	0.0	0.0	0.0	0.0												
6	6	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.032	0.0	0.0	0.0	0.0												
7	7	0.0	0.0	0.0	0.0	0.01	0.0	0.00	0.828	0.0	0.0	0.0	0.0												
8	8	0.0	0.0	0.0	0.0	0.288	0.0	0.0	0.628	0.0	0.0	0.0	0.0085												
9	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.132	0.0	0.0	0.0	0.0												
10	10	0.0	0.0	0.0	0.0	0.03	0.01	0.0	0.122	0.0	0.0	0.0	0.0												
11	11	0.0	0.0	0.0	0.0	0.04	0.00	0.0	0.062	0.0	0.00	0.0	0.0												
12	12	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0												
13	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
14	14	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.08	0.0	0.0	0.0	0.015												
15	15	0.0	0.0	0.0	0.232	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.502												
16	16	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.442												
17	17	0.0	0.0	0.0	0.102	0.0	0.0	0.0	0.0	0.0	0.062	0.092	0.0												
18	18	0.00	0.0	0.0	0.0	0.00	0.0	0.0	0.092	0.01	0.0	0.0	0.0												
19	19	0.0	0.0	0.0	0.0	0.0	0.00	0.182	0.0	0.082	0.192	0.0	0.0												
20	20	0.0	0.072	0.0	0.0	0.0	0.04	0.352	0.0	0.0	0.0	0.0	0.0												
21	21	0.0	0.162	0.0	0.0	0.0	0.00	0.0	0.0	0.20	0.0	0.00	0.0												
22	22	0.0	0.00	0.0	0.0	0.0	0.0	0.04	0.182	0.06	0.01	0.0	0.0												
23	23	0.0	0.0	0.0	0.0	0.0	0.0	0.082	0.292	0.94	0.0	0.0	0.0												
24	24	0.0	0.0	0.0	0.0	0.0	0.0	0.052	0.072	0.00	0.192	0.0	0.0												
25	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.582	0.0	0.0												
26	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.472	0.0	0.0												
27	27	0.0	0.0	0.0	0.0	0.0	0.0	0.402	0.0	0.0	0.0	0.0	0.0												
28	28	0.0	0.0	0.0	0.0	0.022	0.0	0.152	0.0	0.0	0.0	0.0	0.0												
29	29	0.0	0.0	0.0	0.0	0.0	0.0	0.052	0.0	0.012	0.00	0.0	0.152												
30	30	0.0	0.0	0.0	0.0	0.0	0.01	0.412	0.0	0.212	0.0	0.0	0.0												
31	31	0.0	0.0	0.0	0.0	0.0	0.0	0.512	0.0	0.0	0.0	0.0	0.0												
TOTAL		0.13	0.23	0.10	0.33	0.36	0.50	1.82	2.97	1.58	1.31	1.04	0.60												
STA AV		0.21	0.19	0.31	0.59	1.12	1.54	3.15	2.39	1.48	1.36	0.92	0.28												

NOTES: Daily values are Thiessen weighted average amounts from 49 rain gages. Precipitation records began in 1955. STA AV are based on 4 yr (1966-1971).



1971 SELECTED RUNOFF EVENT			SANTA ROSA, NEW MEXICO WATERSHED W-1						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF AUGUST 8 - 9, 1971 (CONTINUED)									
							8- 8	1949	1014.406
								1959	988.374
								2009	973.656
								2019	959.058
								2030	933.784
								2040	894.788
								2050	839.617
								2100	776.892
								2110	650.732
								2120	607.333
								2130	537.635
								2140	474.573
								2150	412.149
								2200	370.887
								2215	318.906
								2230	277.240
								2245	237.853
								2300	198.133
								2330	145.700
								2400	107.453
							8- 9	30	78.787
								100	57.680
								130	44.744
								200	36.308

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000231.



EVENT OF AUGUST 8 - 9, 1971  
SANTA ROSA, NEW MEXICO WATERSHED W-1

## NEWELL, SOUTH DAKOTA WATERSHED W-2

LOCATION: Butte Co., South Dakota, 33 mi. NE of Newell, Sand Creek, South Korean River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	0.77	0.50	0.22	2.34	2.31	1.27	0.55	0.37	1.72	2.85	0.63	0.23	13.76
Q	0.0	0.0	0.915	0.083	0.0	0.0	0.0	0.0	0.006	0.016	0.0	0.0	0.980
STA AV P	0.25	0.26	0.42	1.22	2.08	3.07	1.79	0.95	1.06	0.56	0.34	0.26	12.26
Q	0.006	0.058	0.197	0.021	0.080	0.077	0.133	0.0	0.007	0.001	0.0	0.0	0.580

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 19%; good - 64%; fair - 17%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.2-4. Precipitation from rain gage W-2A. Precipitation and runoff records began January 1956. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	
2	0.0	0.085	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.68	0.0	0.0	
3	0.0	0.145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.015	0.0	0.0	0.0	0.42	0.0	0.0	1.25	0.0	0.0	0.0	
5	0.0	0.045	0.06	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.105	
7	0.0	0.015	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.035	
8	0.025	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.035	0.0	0.0	0.0	0.12	0.0	0.0	0.08	0.0	0.0	0.0	0.0	
10	0.105	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.025	0.0	0.0	0.0	0.0	0.02	0.24	0.0	0.0	0.0	0.0	0.0	
12	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	
13	0.055	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.02	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.23	0.0	0.0	
15	0.0	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.085	0.0	
16	0.0	0.0	0.0	0.0	0.04	0.06	0.0	0.0	0.05	0.01	0.375	0.0	
17	0.075	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.41	0.055	0.0	
18	0.0	0.085	0.0	0.82	0.01	0.0	0.0	0.05	0.0	0.03	0.0	0.0	
19	0.0	0.065	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.015	
20	0.0	0.045	0.0	0.54	0.03	0.0	0.0	0.0	0.02	0.0	0.0	0.025	
21	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.025	0.04	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.025	0.0	0.0	0.03	0.0	0.16	0.10	0.0	0.0	0.0	0.0	0.015	
26	0.155	0.0	0.0	0.205	0.0	0.0	0.0	0.0	0.16	0.04	0.045	0.065	
27	0.0	0.0	0.0	0.083	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.085	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.045	0.045	0.0	
29	0.105	0.0	0.02	0.02	0.29	0.0	0.0	0.12	0.0	0.125	0.025	0.0	
30	0.045	0.0	0.0	0.0	0.16	0.0	0.0	0.11	0.0	0.0	0.025	0.0	
31	0.0	0.0	0.055	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.77	0.50	0.22	2.34	2.31	1.27	0.55	0.37	1.72	2.85	0.63	0.23	
STA AV	0.25	0.26	0.42	1.22	2.08	3.07	1.79	0.95	1.06	0.56	0.34	0.26	

NOTES: Precipitation from rain gage W-2A. STA AV based on 14 yr (1958-71) record period.

1971												
MEAN DAILY DISCHARGE (cfs)						BEWELL, SOUTH DAKOTA WATERSHED W-2						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.072	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	2.561	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.082	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0
18	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.222	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.126	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.092	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.304	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.734	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.077	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.1426	0.0069	0.0	0.0	0.0	0.0	0.0010	0.0025	0.0	0.0
INCHES	0.0	0.0	0.915	0.043	0.0	0.0	0.0	0.0	0.006	0.016	0.0	0.0
STA AV	0.006	0.058	0.197	0.021	0.080	0.077	0.133	0.0	0.007	0.001	0.0	0.0

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.20697.

## NEWELL, SOUTH DAKOTA WATERSHED W-5

LOCATION: Butte Co., South Dakota, 34 mi. NE of Newell, South Moreau River Watershed.

AREA: 46.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
P	0.68	1.50	0.16	1.95	2.50	1.75	0.33	0.48	1.52	4.02	0.97	0.18	16.04
1971 Q	0.0	0.062	1.116	0.038	0.125	0.013	0.0	0.0	0.053	0.169	0.018	0.0	1.794
STA AV P	0.28	0.40	0.58	1.52	2.60	3.96	1.78	1.28	1.07	0.64	0.44	0.38	14.94
Q	0.015	0.029	0.279	0.030	0.092	0.227	0.053	0.075	0.009	0.012	0.001	0.0	0.822

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 7%; good - 93%; Degree of grazing: moderate; Production of cover: 2392 pounds per acre of oven-dry material. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.5-4. Precipitation from rain gauge W-5A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0	0.0		
2	0.0	0.455	0.0	0.0	0.0	0.0	0.02	0.0	0.0	1.01	0.0	0.0		
3	0.0	0.0	0.055	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	1.30	0.0	0.0	0.0		
5	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.035		
7	0.0	0.275	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.075		
8	0.275	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.025	0.0	0.0	0.0	0.48	0.05	0.0	0.12	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.025	0.0	0.0	0.0	0.0	0.50	0.21	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.035	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.045	0.0		
15	0.0	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.115	0.0		
16	0.0	0.0	0.0	0.0	0.03	0.13	0.0	0.0	0.0	0.05	0.425	0.0		
17	0.125	0.0	0.0	0.32	0.0	0.05	0.0	0.0	0.0	0.68	0.055	0.0		
18	0.0	0.065	0.0	0.05	0.0	0.03	0.0	0.05	0.0	0.11	0.025	0.015		
19	0.0	0.025	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015		
20	0.0	0.075	0.0	0.55	0.05	0.0	0.0	0.0	0.03	0.0	0.0	0.015		
21	0.0	0.025	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.055	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.055	0.0	0.0	0.03	0.0	0.10	0.10	0.0	0.0	0.0	0.0	0.0		
26	0.205	0.405	0.0	0.375	0.0	0.0	0.0	0.0	0.0	0.01	0.075	0.055		
27	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0		
28	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.035	0.0		
29	0.0	0.0	0.0	0.02	0.215	0.0	0.0	0.10	0.0	0.0	0.055	0.0		
30	0.0	0.0	0.0	0.0	0.77	0.0	0.0	0.21	0.0	0.0	0.145	0.0		
31	0.0	0.045	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0		
TOTAL	0.68	1.50	0.16	1.95	2.50	1.75	0.33	0.48	1.52	4.02	0.97	0.18		
STA AV	0.28	0.40	0.58	1.52	2.60	3.96	1.78	1.28	1.07	0.64	0.44	0.38		

NOTES: Precipitation from rain gauge W-5A. STA AV based on 14 yr (1958-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												NEWELL, SOUTH DAKOTA WATERSHED W-5											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.213	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.100	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.072	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.168	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.771	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.097	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.033	0.004	0.0	0.0	0.0	0.0	0.0	0.072	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.019	0.0											
20	0.0	0.0	0.278	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.012	0.0											
21	0.0	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0											
22	0.0	0.120	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.296	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.912	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.052	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0043	0.0820	0.0024	0.0078	0.0008	0.0	0.0	0.0034	0.0105	0.0012	0.0											
INCHES	0.0	0.062	1.316	0.038	0.125	0.013	0.0	0.0	0.053	0.169	0.018	0.0											
STA AV	0.015	0.029	0.279	0.030	0.092	0.227	0.053	0.075	0.009	0.012	0.001	0.0											

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.51743.

## NEWELL, SOUTH DAKOTA WATERSHED W-7

LOCATION: Butte Co., South Dakota, 35 mi. NE of Newell, Tributary Trail Creek, South Moreau Watershed.

AREA: 160.00 acres

NEWELL PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-7											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
P	0.48	0.74	0.19	1.78	2.21	1.69	0.34	0.53	1.51	3.34	0.70	0.11	13.62										
1971 Q	0.0	0.0	1.181	0.0	0.0	0.009	0.0	0.0	0.023	0.058	0.006	0.0	1.277										
STA AV P	0.24	0.30	0.53	1.28	2.44	3.51	1.70	1.15	0.99	0.57	0.39	0.31	13.42										
Q	0.019	0.015	0.225	0.018	0.031	0.088	0.026	0.014	0.003	0.004	0.000	0.0	0.444										

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 82%; fair - 18%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Risc. Pub. 945, p. 65.7-4. Precipitation from rain gage W-7A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0													
2	0.0	0.305	0.085	0.0	0.0	0.0	0.02	0.0	0.0	0.63	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	1.24	0.0	0.0													
5	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0									0.025				
7	0.0	0.085	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0									0.045				
8	0.105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
9	0.025	0.0	0.0	0.0	0.58	0.07	0.0	0.12	0.0	0.0	0.0	0.0									0.0				
10	0.0	0.0	0.0	0.0	0.20	0.0	0.02	0.0	0.0	0.0	0.0	0.0									0.0				
11	0.045	0.0	0.0	0.0	0.0	0.33	0.20	0.0	0.0	0.0	0.0	0.0									0.0				
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
13	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.025									0.0				
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.055									0.0				
15	0.0	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.115	0.0									0.0				
16	0.0	0.0	0.0	0.0	0.0	0.04	0.30	0.0	0.0	0.03	0.315	0.0									0.0				
17	0.125	0.0	0.0	0.36	0.0	0.06	0.0	0.0	0.0	0.59	0.035	0.0									0.0				
18	0.0	0.035	0.0	0.04	0.0	0.03	0.0	0.05	0.0	0.03	0.0	0.015									0.0				
19	0.0	0.015	0.0	0.30	0.0	0.0	0.0	0.05	0.0	0.0	0.015	0.015									0.0				
20	0.0	0.055	0.0	0.46	0.05	0.0	0.0	0.0	0.03	0.0	0.0	0.015									0.0				
21	0.0	0.015	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
22	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
23	0.0	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
24	0.0	0.0	0.055	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									0.0				
25	0.0	0.0	0.0	0.03	0.0	0.20	0.10	0.0	0.0	0.0	0.0	0.0									0.0				
26	0.205	0.105	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.025	0.045	0.025									0.0				
27	0.105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.025	0.0									0.0				
28	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.045	0.0									0.0				
29	0.0	0.0	0.02	0.20	0.0	0.0	0.0	0.17	0.0	0.0	0.035	0.0									0.0				
30	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.19	0.0	0.0	0.045	0.0									0.0				
31	0.0	0.045	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.105	0.0	0.0									0.0				
TOTAL	0.48	0.74	0.19	1.78	2.21	1.69	0.34	0.53	1.51	3.34	0.70	0.11													
STA AV	0.24	0.30	0.53	1.28	2.44	3.51	1.70	1.15	0.99	0.57	0.39	0.31													

NOTES: Precipitation from rain gage W-7A. STA AV based on 14 yr (1958-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													NEWELL, SOUTH DAKOTA WATERSHED #7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.269	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.155	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	2.799	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.087	0.0	0.0		
21	0.0	0.0	0.605	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.027	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0		
24	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	3.428	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.343	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0	0.0	0.2561	0.0	0.0	0.0020	0.0	0.0	0.0052	0.0126	0.0013	0.0		
INCHES	0.0	0.0	1.181	0.0	0.0	0.009	0.0	0.0	0.023	0.058	0.006	0.0		
STA AV	0.019	0.015	0.225	0.018	0.031	0.088	0.026	0.014	0.003	0.004	0.000	0.0		

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.14876.

## NEWELL, SOUTH DAKOTA WATERSHED W-12

LOCATION: Butte Co., South Dakota, 9 mi. East of Newell, Belle Fourche River Watershed.

AREA: 90.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)											
NEWELL, SOUTH DAKOTA WATERSHED W-12											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
P	0.57	0.61	0.22	2.41	2.40	2.77	0.13	2.60	2.12	3.05	0.63
1971 Q	0.0	0.0	1.457	0.336	0.056	0.261	0.0	0.285	0.360	0.896	0.0
STA AV P	0.29	0.27	0.57	1.48	2.52	3.21	1.52	1.07	1.25	0.65	0.40
Q	0.062	0.048	0.460	0.266	0.727	0.592	0.094	0.063	0.040	0.064	0.009
Annual											

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 94%; fair - 6%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Risc. Pub. 945, p. 65-12-4. Precipitation from rain gage W-12A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)												
NEWELL, SOUTH DAKOTA WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.04S	0.09S	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0
2	0.0	0.01S	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.61	0.0	0.0
3	0.0	0.04S	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.19	0.03	0.0	1.46	0.0	0.0	0.0
5	0.0	0.0	0.0	0.06S	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0
6	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S
7	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.04S
8	0.07S	0.04S	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0
9	0.03S	0.08S	0.0	0.0	0.10	0.0	0.0	0.02	0.0	0.0	0.0	0.0
10	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.01S	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.04	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.10	0.10S	0.0
16	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.03	0.03	0.31S	0.0
17	0.04S	0.0	0.03S	0.23	0.02	0.32	0.0	0.12	0.01	0.60	0.03S	0.0
18	0.07S	0.03S	0.01S	0.10	0.0	0.81	0.0	0.18	0.0	0.03	0.02S	0.01S
19	0.0	0.05S	0.03S	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.01S
20	0.10S	0.02S	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S
21	0.03S	0.03S	0.02S	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.04S	0.03	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.01	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.01S	0.09	0.0	0.02	0.10	0.0	0.0	0.0	0.0	0.0
26	0.0	0.26S	0.01S	0.43	0.0	0.0	0.0	0.0	0.0	0.04	0.02S	0.03S
27	0.0	0.02S	0.0	0.07	0.0	0.0	0.0	0.0	0.06	0.01S	0.04S	0.03S
28	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.07S	0.04S	0.0
29	0.05S	0.0	0.04	0.05	0.0	0.0	0.0	2.05	0.0	0.10S	0.04S	0.0
30	0.10S	0.0	0.02	0.96	0.0	0.0	0.05	0.0	0.0	0.02S	0.0	0.0
31	0.05S	0.0		0.03	0.0		0.0			0.0		0.0
TOTAL	0.57	0.61	0.22	2.41	2.40	2.77	0.13	2.60	2.12	3.05	0.63	0.16
STA AV	0.29	0.27	0.57	1.48	2.52	3.21	1.52	1.07	1.25	0.65	0.40	0.28

NOTES: Precipitation from rain gage W-12A. STA AV based on 14 yr (1958-71) record period.

1971													REVELL, SOUTH DAKOTA WATERSHED #12												
MEAN DAILY DISCHARGE (cfs)																									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.106	0.0	0.386	0.0	0.0	2.382	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0	0.0	1.028	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.333	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	2.817	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.601	0.0	0.0	0.964	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.318	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.344	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.0	0.367	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.560	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.234	0.212	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
27	0.0	0.0	0.0	0.771	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.185	0.0	0.0	0.0	0.0	1.078	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.079	0.0	0.189	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
MEAN	0.0	0.0	0.1777	0.0423	0.0068	0.0329	0.0	0.0348	0.0454	0.1093	0.0	0.0													
INCHES	0.0	0.0	1.4577	0.336	0.056	0.261	0.0	0.285	0.360	0.896	0.0	0.0													
STA AV	0.062	0.048	0.460	0.266	0.727	0.592	0.094	0.063	0.040	0.064	0.009	0.006													

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.26446.

## NEWELL, SOUTH DAKOTA WATERSHED W-13

LOCATION: Heade Co., South Dakota, 26 mi. East of Newell, South Fork Sulphur Creek, Cheyenne River Watershed.

AREA: 160.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-13	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	0.72	0.46	0.20	1.93	2.38	2.30	0.96	0.54	2.17	3.07	0.67	0.10	15.50
Q	0.0	0.925	1.060	0.009	0.004	0.0	0.0	0.0	0.012	0.027	0.0	0.0	2.037
STA AV P	0.27	0.27	0.45	1.30	2.43	3.16	1.50	1.02	0.97	0.60	0.35	0.29	12.59
Q	0.0	0.121	0.299	0.086	0.296	0.266	0.001	0.0	0.002	0.002	0.001	0.0	1.074

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 8%; good - 67%; fair - 25%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Risc. Pub 945, p. 65.13-4. Thiessen weighted precipitation from gages W-13B and W-13C. Precipitation and runoff records began January 1956. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-13	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.025	0.025	0.0	0.0	0.0	0.0	0.0	1.50	0.0	0.0	
2	0.0	0.055	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.32	0.0	0.0	
3	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	1.66	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	
6	0.0	0.0	0.065	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.015	
7	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.025	
8	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.015	0.0	0.0	0.0	0.05	0.28	0.0	0.15	0.0	0.0	0.0	0.0	
10	0.025	0.0	0.0	0.0	0.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.045	0.0	0.0	0.0	0.0	0.30	0.79	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.02	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.17	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.06	0.175	0.0	
16	0.0	0.0	0.0	0.0	0.055	0.0	0.0	0.0	0.02	0.0	0.295	0.0	
17	0.065	0.025	0.025	0.27	0.0	0.43	0.0	0.02	0.02	0.73	0.025	0.0	
18	0.125	0.075	0.015	0.02	0.02	0.35	0.0	0.19	0.0	0.03	0.015	0.015	
19	0.0	0.025	0.0	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025	
20	0.135	0.015	0.0	0.22	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.015	
21	0.025	0.035	0.025	0.18	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.045	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.02	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.09	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.165	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.08	0.045	0.035	
27	0.0	0.045	0.0	0.08	0.0	0.0	0.0	0.0	0.10	0.02	0.015	0.0	
28	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.015	0.0	
29	0.105	0.0	0.05	0.21	0.0	0.0	0.09	0.0	0.0	0.025	0.0	0.0	
30	0.095	0.0	0.0	0.66	0.0	0.0	0.07	0.0	0.0	0.105	0.0	0.0	
31	0.025		0.035		0.19		0.0	0.0		0.16		0.0	
TOTAL	0.72	0.46	0.20	1.93	2.38	2.30	0.96	0.54	2.17	3.07	0.67	0.10	
STA AV	0.27	0.27	0.45	1.30	2.43	3.16	1.50	1.02	0.97	0.60	0.35	0.29	

NOTES: Thiessen weighted precipitation from gages W-13B and W-13C. STA AV based on 14 yr (1958-71) record period.

1971											
MEAN DAILY DISCHARGE (cfs)						NEWELL, SOUTH DAKOTA WATERSHED W-13					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.161	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.081	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	6.998	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	6.218	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.2221	0.2259	0.0020	0.0009	0.0	0.0	0.0	0.0027	0.0059	0.0
INCHES	0.0	0.925	1.060	0.009	0.004	0.0	0.0	0.0	0.012	0.027	0.0
STA AV	0.0	0.121	0.259	0.086	0.296	0.266	0.001	0.0	0.002	0.002	0.001

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAV, multiply by 0.14876.

## NEWELL, SOUTH DAKOTA WATERSHED W-14

LOCATION: Butte Co., South Dakota, 16 mi. SE of Newell, Belle Fourche River Watershed.

AREA: 35.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA	WATERSHED W-14
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	1.21	0.56	0.55	2.67	2.88	2.59	0.22	0.36	2.71	3.08	0.80	0.23	17.82
Q	0.0	0.0	1.14	0.133	0.120	0.226	0.0	0.0	0.009	0.132	0.0	0.0	1.761
STA AV P	0.46	0.36	0.70	1.87	2.38	3.02	1.81	0.93	1.22	0.68	0.48	0.42	14.29
Q	0.066	0.046	0.116	0.190	0.232	0.289	0.135	0.015	0.007	0.009	0.007	0.0	1.313

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 54%; fair - 46%; Degree of grazing moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.10-4. Precipitation from rain gage W-14A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1971 DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA	WATERSHED W-14
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.06S	0.0	0.02	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0
2	0.0	0.06S	0.0	0.0	0.06	1.15	0.0	0.0	0.0	0.31	0.0	0.0	0.0
3	0.0	0.06S	0.0	0.0	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	1.75	0.0	0.01S	0.0	0.0
5	0.0	0.04S	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.01S	0.0	0.0
6	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.0
7	0.0	0.05S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.07S	0.0
8	0.08S	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.02S	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.02S	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.02S	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.04S	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.02	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0
15	0.0	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.10S	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.41S	0.0	0.0
17	0.10S	0.0	0.05S	0.30	0.0	0.14	0.0	0.0	0.0	0.65	0.03S	0.0	0.0
18	0.0	0.08S	0.13S	0.04	0.0	0.08	0.0	0.24	0.0	0.02	0.01S	0.0	0.0
19	0.0	0.07S	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	0.0
20	0.27S	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.10S	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.02S	0.03	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.03	0.03	0.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.59	0.18	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.10S	0.75	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0
26	0.10S	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	0.03S	0.0
27	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.20	0.0	0.04S	0.02S	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40S	0.0	0.07S	0.0	0.0	0.0
29	0.07S	0.0	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0	0.02S	0.0	0.0
30	0.14S	0.07S	0.01S	0.78	0.0	0.0	0.12	0.0	0.0	0.02S	0.0	0.0	0.0
31	0.23S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26S	0.0	0.0	0.0	0.0
TOTAL	1.21	0.56	0.55	2.67	2.84	2.59	0.22	0.36	2.71	3.08	0.80	0.23	
STA AV	0.46	0.36	0.70	1.87	2.38	3.02	1.81	0.93	1.22	0.68	0.48	0.42	

NOTES: Precipitation from rain gage W-14A. STA AV based on 14 yr (1958-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0	0.126	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029	0.0	0.0
19	0.0	0.0	1.603	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.122	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0541	0.0065	0.0057	0.0111	0.0	0.0	0.0004	0.0063	0.0	0.0
INCHES	0.0	0.0	1.441	0.133	0.120	0.226	0.0	0.0	0.009	0.132	0.0	0.0
STA AV	0.066	0.046	0.316	0.190	0.232	0.289	0.135	0.015	0.007	0.009	0.007	0.0

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IW/DAY, multiply by 0.68005.

## NEWELL, SOUTH DAKOTA WATERSHED W-15

LOCATION: Butte Co., South Dakota, 16 mi. SE of Jewell, Belle Fourche River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)						NEWELL, SOUTH DAKOTA				WATERSHED W-15				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971	P	0.70	0.51	0.37	2.32	3.23	2.38	0.23	0.35	2.72	2.77	0.63	0.16	16.37
	Q	0.00	0.00	1.228	0.129	0.150	0.224	0.00	0.00	0.00	0.171	0.017	0.00	1.919
STA AV	P	0.43	0.31	0.65	1.82	2.46	3.02	1.87	0.91	1.20	0.68	0.44	0.36	14.14
	Q	0.055	0.019	0.209	0.225	0.307	0.247	0.144	0.006	0.007	0.012	0.009	0.00	1.241

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 41%; fair - 59%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 65.15-4. Precipitation from rain gage W-15A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 14 yr (1958-71) record period. For long-time precipitation records, see National Weather Service records at Jewell, South Dakota.

1971 DAILY PRECIPITATION (inches)														NEWELL, SOUTH DAKOTA WATERSHED W-15						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
1	0.0	0.045	0.055	0.0	0.02	0.52	0.0	0.0	0.08	1.20	0.0	0.0								
2	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.59	0.0	0.0								
3	0.0	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0								
4	0.0	0.0	0.0	0.025	0.0	0.13	0.0	0.0	1.53	0.0	0.015	0.0								
5	0.0	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.015	0.0								
6	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025								
7	0.0	0.025	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.085								
8	0.085	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
9	0.025	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
10	0.025	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
11	0.025	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0								
12	0.105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
13	0.045	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.01	0.0	0.0	0.0								
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0								
15	0.0	0.105	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.02	0.155	0.0								
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.305	0.0								
17	0.035	0.0	0.055	0.28	0.0	0.18	0.0	0.0	0.0	0.60	0.025	0.0								
18	0.0	0.085	0.135	0.04	0.0	0.04	0.0	0.23	0.0	0.02	0.015	0.0								
19	0.0	0.055	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.045								
20	0.195	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015								
21	0.0	0.0	0.025	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
22	0.0	0.0	0.015	0.03	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
23	0.0	0.0	0.0	0.03	0.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
24	0.0	0.0	0.0	0.0	0.0	0.60	0.16	0.0	0.0	0.0	0.0	0.0								
25	0.0	0.0	0.025	0.438	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.015								
26	0.045	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.045	0.045								
27	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.24	0.0	0.025	0.0								
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.035	0.0								
29	0.035	0.0	0.0	0.0	0.03	0.04	0.0	0.0	0.0	0.0	0.025	0.0								
30	0.095	0.075	0.02	0.99	0.0	0.0	0.0	0.12	0.0	0.0	0.025	0.0								
31	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0								
TOTAL	0.70	0.51	0.37	2.32	3.23	2.38	0.23	0.35	2.72	2.77	0.63	0.16								
STA AV	0.43	0.31	0.65	1.82	2.46	3.02	1.87	0.91	1.20	0.68	0.44	0.36								

NOTES: Precipitation from rain gage W-15A. STA AV based on 14 yr (1958-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-15												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	1.082	0.0	0.0	0.0	0.498	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.082	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.329	0.0	0.0
19	0.0	0.0	5.933	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.261	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.387	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.314	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.1914	0.0208	0.0234	0.0361	0.0	0.0	0.0	0.0267	0.0027	0.0
INCHES	0.0	0.0	1.228	0.129	0.150	0.224	0.0	0.0	0.0	0.171	0.017	0.0
STA AV	0.055	0.019	0.209	0.225	0.307	0.247	0.144	0.006	0.007	0.012	0.009	0.0

NOTES: STA AV based on 14 yr (1958-71) record period. To convert mean daily discharge in CFS to IN/DAV, multiply by 0.20697.

## NORTH DANVILLE, VERMONT WATERSHED W-1

LOCATION: Caledonia County, Vermont, 5 mi. NW of St. Johnsbury; Sleepers River, Connecticut River Basin.

AREA: 10611.20 acres 16.58 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														NORTH DANVILLE, VERMONT WATERSHED W-1																																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																																		
1971	P 3.09	4.88	4.91	3.82	4.29	2.83	5.03	10.72	1.85	3.06	4.55	3.95	52.98																																		
	Q 0.467	0.789	0.838	5.109	5.653	0.779	0.347	1.484	0.572	0.735	0.642	1.120	18.536																																		
STA AV	P 2.77	3.46	3.41	3.71	3.82	4.03	3.82	5.03	3.16	4.06	4.65	3.99	45.90																																		
	Q 0.845	0.892	1.499	6.197	2.916	0.964	0.521	0.537	0.421	1.148	1.463	1.302	18.705																																		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																															
Maximum Discharge														Maximum Volume for Selected Time Interval																																	
1 Hour			2 Hours			6 Hours			12 Hours			1 Day			2 Days			8 Days																													
Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.																					
1971	8-28	0.060	8-28	0.059	8-28	0.114	8-28	0.269	8-28	0.421	8-28	0.574	5-2	0.928	5-1	2.866																															
MAXIMUMS FOR PERIOD OF RECORD																																															
10-24			0.100			10-24			0.100			10-24			0.200			10-24			0.500			10-24			0.780			10-24			1.150			10-24			1.450			4-12			3.860		
1959						1959						1959						1959						1959						1959						1959						1960					

NOTES: Watershed conditions: Predominately hardwood forest, 64%; cultivated-16% in long hay rotations and about 1% in row crops, total 17%; pasture, largely bluegrass 15%; idle land in grass and woody plants, 3%; and homesites and roads, 1%. For map of watershed, see hydrologic data for Experimental Agricultural Watersheds in the United States, 1946-59, USDA Misc. Pub. 945, p. 67-1-4. Precipitation records began January 1, 1959. Runoff records began October 1959. Part year values not included in STA AV. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1971 DAILY AIR TEMPERATURE (degrees F)													NORTH DANVILLE, VERMONT WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	15	-1	6	-22	36	25	40	10	53	34	66	36	80	60	79	59	67	37	68	40	60	33	39	22	
2	27	12	-5	-20	30	12	50	33	52	32	72	30	70	54	79	63	73	38	79	43	53	33	56	36	
3	27	8	6	-26	26	7	46	28	45	40	70	47	66	44	68	61	81	50	65	40	50	34	45	30	
4	30	6	17	-18	25	18	36	25	46	38	68	48	78	38	67	53	83	59	55	43	47	29	34	12	
5	34	25	26	8	24	16	41	20	56	34	59	30	82	46	67	48	81	65	65	49	41	23	25	11	
6	25	20	34	12	30	10	88	12	64	30	68	32	75	52	76	56	69	60	63	45	49	23	23	14	
7	20	0	28	10	28	14	36	26	62	32	85	44	76	52	74	54	79	59	47	39	46	25	13	-2	
8	6	-17	36	24	28	16	30	18	64	30	78	54	78	54	81	47	81	62	50	31	27	14	11	-6	
9	13	-20	34	14	22	12	50	12	60	40	64	42	83	58	84	58	74	46	46	31	27	8	23	2	
10	7	2	16	-2	32	12	46	34	72	34	60	42	78	52	85	61	73	41	53	47	32	12	30	15	
11	32	15	24	2	34	20	48	30	78	37	68	32	68	48	79	65	74	47	56	41	30	24	16	0	
12	24	-18	36	24	32	7	58	26	75	44	74	42	71	40	67	48	70	64	49	36	32	21	12	-6	
13	4	-24	42	31	38	2	54	30	62	40	72	50	75	39	80	44	69	63	54	25	31	18	20	9	
14	21	-10	41	12	46	26	40	26	50	34	70	42	71	57	80	53	68	61	66	49	37	8	20	11	
15	22	0	22	6	48	30	32	22	72	28	68	42	76	53	60	55	75	61	71	47	33	10	18	-7	
16	0	-14	22	-4	46	29	36	24	64	42	76	44	79	50	72	47	75	53	68	41	38	10	17	-11	
17	0	-22	29	-6	32	18	40	22	62	45	78	53	80	57	80	42	60	49	54	35	36	13	29	12	
18	-2	-26	41	26	26	14	45	32	80	40	82	48	69	52	82	53	62	45	59	30	37	32	24	17	
19	-1	-23	32	17	36	10	53	40	84	50	82	54	70	51	86	54	64	38	68	34	48	32	30	18	
20	4	-24	26	18	36	16	54	36	78	54	86	56	67	49	79	56	63	51	54	42	20	22	28	8	
21	16	-18	27	18	30	26	43	35	57	46	73	60	77	44	73	55	65	44	68	37	34	20	14	-14	
22	26	4	28	11	34	12	38	32	50	36	70	50	79	48	75	53	66	36	62	38	32	22	4	-20	
23	30	10	30	2	40	30	50	32	80	50	83	56	60	45	64	34	60	46	24	10	18	4	18	4	
24	33	12	30	10	24	14	54	26	66	28	74	50	79	48	61	43	55	37	54	38	24	5	23	8	
25	40	22	34	8	26	14	48	33	64	48	71	46	79	60	66	36	58	29	51	42	25	22	19	-6	
26	32	16	40	18	32	0	46	32	62	50	68	52	80	59	72	47	63	35	61	51	27	22	21	10	
27	14	-10	37	30	40	2	88	30	57	49	72	46	75	56	64	53	63	31	64	50	30	18	17	13	
28	2	-12	40	28	44	8	54	26	63	43	74	42	75	47	66	53	59	49	73	47	33	27	12	8	
29	15	-5	42	24	44	38	79	36	80	48	71	53	76	55	69	55	65	36	34	32	18	4	4	4	
30	24	8	39	26	54	34	78	44	90	62	76	61	74	52	67	44	64	34	39	32	9	2	2	2	
31	14	-12	34	18			64	46			79	61	66	43			87	33							
AV.	18	-2	26	8	33	15	44	27	64	39	71	44	76	52	73	52	67	47	60	40	35	20	22	6	
MEAN	7.3	17.0	24.1	35.1	51.4	57.8	63.8	62.8	56.7	50.0	28.0	14.3													
STA AV	22	3	23	3	34	15	46	27	59	37	71	46	74	52	72	49	64	42	54	35	38	23	24	9	

NOTES: Temperature data is from R-12 station. Readings taken daily from hygrothermograph charts. STA AV based on 1960-71 record period.

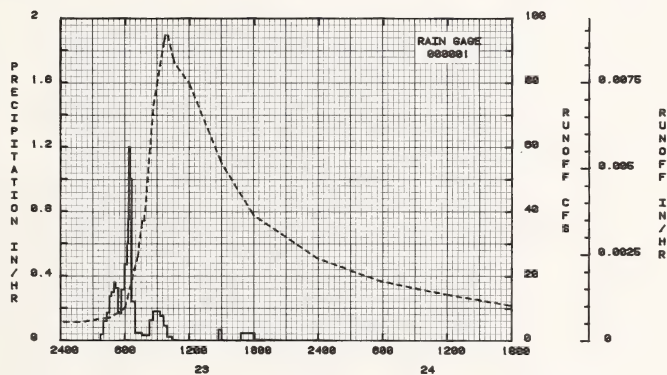
1971 DAILY PRECIPITATION (inches)													NORTH DANVILLE, VERMONT WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.01	0.03	0.02	0.0	0.0	1.26	0.0	0.0	0.0	0.0	0.0	1	0.0	0.01	0.03	0.02	0.0	0.0	1.26	0.0	0.0	0.0	0.0	
2	0.02	0.07	0.0	0.28	0.43	0.11	0.0	0.56	0.0	0.25	0.30	0.02	2	0.13	0.0	0.37	0.10	1.01	0.09	0.0	2.74	0.0	0.0	0.25	
3	0.13	0.0	0.37	0.10	1.01	0.09	0.0	2.74	0.0	0.0	0.0	0.25	3	0.0	0.01	1.15	0.04	0.24	0.01	0.0	0.01	0.0	0.0	0.06	
4	0.0	0.01	1.15	0.04	0.24	0.01	0.0	0.01	0.0	0.0	0.0	0.06	4	0.11	0.47	0.25	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.10	
5	0.11	0.47	0.25	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.10	5	0.0	0.03	0.05	0.0	0.0	0.0	0.19	0.0	0.0	0.15	0.0	
6	0.0	0.03	0.05	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.15	0.0	6	0.19	0.08	0.95	0.28	0.0	0.69	0.0	0.0	0.08	0.36	0.10	
7	0.19	0.08	0.95	0.28	0.0	0.69	0.0	0.0	0.0	0.0	0.08	0.36	7	0.0	0.92	0.17	0.0	0.01	0.77	0.0	0.0	0.0	0.20	0.01	
8	0.0	0.92	0.17	0.0	0.01	0.77	0.0	0.0	0.0	0.0	0.20	0.01	8	0.0	0.39	0.04	0.0	0.09	0.0	0.0	0.10	0.0	0.31	0.0	
9	0.0	0.39	0.04	0.0	0.09	0.0	0.0	0.10	0.0	0.31	0.0	0.0	9	0.04	0.04	0.0	0.70	0.0	0.0	0.0	0.0	1.55	0.06	0.06	
10	0.04	0.04	0.0	0.70	0.0	0.0	0.0	0.0	0.0	1.55	0.06	0.06	10	0.07	0.01	0.31	0.55	0.0	0.0	0.41	0.0	0.08	0.13	0.08	
11	0.07	0.01	0.31	0.55	0.0	0.0	0.0	0.41	0.0	0.08	0.13	0.08	11	0.0	0.15	0.05	0.0	0.0	0.0	0.0	0.58	0.16	0.06	0.0	
12	0.0	0.15	0.05	0.0	0.0	0.0	0.41	0.0	0.0	0.58	0.16	0.06	12	0.0	0.51	0.0	0.0	0.35	0.0	0.37	0.0	0.07	0.0	0.09	
13	0.0	0.51	0.0	0.0	0.35	0.0	0.37	0.0	0.07	0.0	0.0	0.09	13	0.0	0.28	0.0	0.13	0.01	0.99	0.0	0.33	0.0	0.0	0.03	
14	0.0	0.28	0.0	0.13	0.01	0.99	0.0	0.33	0.0	0.0	0.0	0.03	14	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.27	
15	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.27	15	0.0	0.0	0.07	0.43	0.0	0.0	0.17	0.0	0.01	0.0	0.25	
16	0.0	0.0	0.07	0.43	0.0	0.0	0.17	0.0	0.01	0.0	0.0	0.25	16	0.0	0.02	0.0	0.0	0.10	0.0	0.58	0.0	0.04	0.0	0.03	
17	0.0	0.02	0.0	0.0	0.10	0.0	0.58	0.0	0.04	0.0	0.0	0.03	17	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.08	
18	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.08	18	0.0	0.0	0.48	0.0	0.0	0.0	0.49	0.0	0.0	0.15	0.05	
19	0.0	0.0	0.48	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.15	0.05	19	0.0	0.58	0.38	0.0	0.02	0.0	0.0	0.83	0.10	0.0	0.06	
20	0.0	0.58	0.38	0.0	0.02	0.0	0.83	0.10	0.0	0.06	0.05	0.06	20	0.32	0.08	0.0	0.23	0.43	0.50	0.0	0.19	0.40	0.0	0.07	
21	0.32	0.08	0.0	0.23	0.43	0.50	0.0	0.19	0.40	0.0	0.06	0.07	21	0.14	0.0	0.01	0.47	0.14	0.0	0.0	0.14	0.0	0.0	0.07	
22	0.14	0.0	0.01	0.47	0.14	0.0	0.0	0.14	0.0	0.0	0.0	0.07	22	0.83	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.83	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.02	0.05	0.0	0.0	0.02	0.01	0.09	0.0	0.0	0.0	0.62	
24	0.02	0.05	0.0	0.0	0.02	0.01	0.09	0.0	0.0	0.0	0.0	0.62	24	0.0	0.0	0.0	0.09	0.76	0.65	0.02	0.0	0.0	0.59	1.53	
25	0.0	0.0	0.0	0.09	0.76	0.65	0.02	0.0	0.59	1.53	0.19	0.0	25	1.15	0.0	0.0	0.02	0.20	0.0	0.0	0.0	0.0	0.02	0.15	
26	1.15	0.0	0.0	0.02	0.20	0.0	0.0	0.0	0.0	0.0	0.02	0.15	26	0.27	0.11	0.0	0.04	0.27	0.0	0.39	0.43	0.0	0.0	0.04	
27	0.27	0.11	0.0	0.04	0.27	0.0	0.39	0.43	0.0	0.0	0.04	0.14	27	0.05	0.10	0.0	0.06	0.0	0.0	3.66	0.0	0.0	0.04	0.20	
28	0.05	0.10	0.0	0.06	0.0	0.0	3.66	0.0	0.0	0.0	0.04	0.20	28	0.05	0.02	0.10	0.0	0.0	0.0	0.07	0.10	0.0	0.0	0.07	
29	0.05	0.02	0.10	0.0	0.0	0.0	0.07	0.10	0.0	0.0	0.0	0.07	29	0.29	0.0	0.17	0.23	0.0	0.0	0.21	0.0	0.0	0.68	0.62	
30	0.29	0.0	0.17	0.23	0.0	0.0	0.21	0.0	0.0	0.0	0.68	0.62	30	0.03	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.09	
31	0.03	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.09	31	3.09	4.88	4.91	3.82	4.29	2.83	5.03	10.72	1.85	3.06	4.55	3.95
TOTAL	3.09	4.88	4.91	3.82	4.29	2.83	5.03	10.72	1.85	3.06	4.55	3.95	STA AV	2.77	3.46	3.41	3.71	3.82	4.03	3.82	5.03	3.16	4.06	4.65	3.99

NOTES: Daily precipitation values from rain gage R-01. All precipitation is rain except for the months of January, February, and December during which all precipitation is snow or rain on snow. STA AV based on 13 yr (1959-71) record period.

1971 SEAN DAILY DISCHARGE (cfs)													NORTH DANVILLE, VERMONT WATERSHED W-1														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	9.56	5.66	12.70	10.47	133.73	15.43	18.56	4.83	13.55	4.33	6.84	12.40	1	9.56	5.66	12.70	10.47	133.73	15.43	18.56	4.83	13.55	4.33	6.84	12.40		
2	9.02	5.66	10.66	11.65	127.60	13.72	18.98	7.66	10.64	4.10	6.41	11.01	2	9.02	5.66	10.66	11.65	127.60	13.72	18.98	7.66	10.64	4.10	6.41	11.01		
3	7.73	5.53	10.19	29.32	223.238	17.94	7.12	89.21	9.32	5.08	10.48	11.35	3	7.73	5.53	10.19	29.32	223.238	17.94	7.12	89.21	9.32	5.08	10.48	11.35		
4	7.37	5.15	10.37	44.40	191.40	15.70	5.11	49.18	8.88	4.22	8.55	10.68	4	7.37	5.15	10.37	44.40	191.40	15.70	5.11	49.18	8.88	4.22	8.55	10.68		
5	8.17	5.40	9.82	25.50	160.77	12.44	4.07	15.34	8.49	4.22	8.17	10.038	5	8.17	5.40	9.82	25.50	160.77	12.44	4.07	15.34	8.49	4.22	8.17	10.038		
6	8.94	5.66	9.36	23.438	152.75	11.20	3.49	8.44	8.04	4.80	7.45	10.47	6	8.94	5.66	9.36	23.438	152.75	11.20	3.49	8.44	8.04	4.80	7.45	10.47		
7	8.33	5.66	9.73	22.63	157.74	10.42	3.87	5.74	7.55	6.64	16.15	10.47	7	8.33	5.66	9.73	22.63	157.74	10.42	3.87	5.74	7.55	6.64	16.15	10.47		
8	7.63	5.868	9.72	19.25	137.14	9.46	2.96	4.40	6.68	5.64	13.01	10.19	8	7.63	5.868	9.72	19.25	137.14	9.46	2.96	4.40	6.68	5.64	13.01	10.19		
9	7.27	7.54	9.01	19.57	140.99	39.00	2.63	3.60	5.68	5.53	8.798	10.67	9	7.27	7.54	9.01	19.57	140.99	39.00	2.63	3.60	5.68	5.53	8.798	10.67		
10	7.37	8.93	8.67	26.92	125.74	17.76	2.46	3.25	5.09	42.66	8.45	13.56	10	7.37	8.93	8.67	26.92	125.74	17.76	2.46	3.25	5.09	42.66	8.45	13.56		
11	7.14	10.23	8.67	79.02	115.97	12.74	2.22	4.54	4.85	48.99	9.01	40.90	11	7.14	10.23	8.67	79.02	115.97	12.74	2.22	4.54	4.85	48.99	9.01	40.90		
12	6.84	11.97	8.58	91.91	95.06	10.62	2.02	5.04	12.14	18.10	8.67	33.04	12	6.84	11.97	8.58	91.91	95.06	10.62	2.02	5.04	12.14	18.10	8.67	33.04		
13	6.17	13.808	8.33	83.99	93.37	9.20	1.96	3.19	12.66	13.72	8.67	21.08	13	6.17	13.808	8.33	83.99	93.37	9.20	1.96	3.19	12.66	13.72	8.67	21.08		
14	5.73	15.198	8.90	74.85	68.16	8.01	6.50	2.58	14.69	11.49	7.348	16.028	14	5.73	15.198	8.90	74.85	68.16	8.01	6.50	2.58	14.69	11.49	7.348	16.028		
15	5.66	20.098	12.52	51.78	52.81	7.14	5.80	2.46	15.09	10.05	7.55	15.46	15	5.66	20.098	12.52	51.78	52.81	7.14	5.80	2.46	15.09	10.05	7.55	15.46		
16	5.66	34.268	20.99	41.95	45.38	6.748	3.76	2.53	9.75	8.71	7.26	38.88	16	5.66	34.268	20.99	41.95	45.38	6.748	3.76	2.53	9.75	8.71	7.26	38.88		
17	5.66	33.458	30.43	44.31	48.44	6.16	4.71	2.22	9.54	8.25	7.25	28.72	17	5.66	33.458	30.43	44.31	48.44	6.16	4.71	2.22	9.54	8.25	7.25	28.72		
18	5.45	29.958	20.152	66.88	39.71	5.41	7.58	1.98	11.18	7.53	8.32	16.37	18	5.45	29.958	20.152	66.88	39.71	5.41	7.58	1.98	11.18	7.53	8.32	16.37		
19	5.40	19.138	12.298	140.71	33.57	4.44	8.728	1.94	8.98	13.06	10.83	10.15	19	5.40	19.138	12.298	140.71	33.57	4.44	8.728	1.94	8.98	13.06	10.83	10.15		
20	5.45	29.958	16.48	177.53	28.86	4.44	11.9	3.06	7.27	6.59	19.66	15.84	20	5.45	29.958	16.48	177.53	28.86	4.44	11.9	3.06	7.27	6.59	19.66	15.84		
21	5.77	12.27	13.02	152.43	34.22	8.36	5.41	8.60	12.21	6.77	12.51	14.49	21	5.77	12.27	13.02	152.43	34.22	8.36	5.41	8.60	12.21	6.77	12.51	14.49		
22	6.20	10.81	12.17	135.65	46.68	10.83	3.59	6.20	9.31	6.77	10.44	11.278	22	6.20	10.81	12.17	135.65	46.68	10.83	3.59	6.20	9.31	6.77	10.44	11.278		
23	6.20	10.61	12.17	94.70	32.03	6.192	2.93	39.57	7.05	6.77	6.33	9.89	23	6.20	10.61	12.17	94.70	32.03	6.192	2.93	39.57	7.05	6.77	6.33	9.89		
24	5.99	10.47	12.54	94.14	24.82	5.15	2.54	15.08	6.05	6.46	4.53	12.00	24	5.99	10.47	12.54	94.14	24.82	5.15	2.54	15.08	6.05	6.46	4.53	12.00		
25	5.93	9.68	10.52	111.40	23.68	6.72	2.81	7.32	5.63	12.00	6.13	21.63	25	5.93	9.68	10.52	111.40	23.68	6.72	2.81	7.32	5.63	12.00	6.13	21.63		
26	6.10	9.36	10.47	100.13	49.93	13.20	2.51	5.30	5.15	16.68	6.94	19.66	26	6.10	9.36	10.47	100.13	49.93	13.20	2.51	5.30	5.15	16.68	6.94	19.66		
27	11.00	10.51	10.78	10.21	70.21	7.70	2.71	7.07	7.17	10.38	10.47	11.00	27	11.00	10.51	10.78	10.21	70.21	7.70	2.71	7.07	7.17	10.38	10.47	11.00		
28	6.57	16.73	10.31	120.46	37.91	4.46	2.50	233.55	4.55	9.35	10.47	14.13	28	6.57	16.73	10.31	120.46	37.91	4.46	2.50	233.55	4.55	9.35	10.47	14.13		
29	5.99			11.15	135.45	26.31	3.83	2.42	69.14	10.08	8.21	10.17	29	5.99			11.15	135.45	26.31	3.83	2.42	69.14	10.08	8.21	10.17		
30	5.99			10.47	132.13	13.79	3.51	3.29	5.26	5.26	13.37	10.86	30	5.99			10.47	132.13	13.79	3.51	3.29	5.26	5.26	13.37	10.86		
31	5.73			10.47		18.39		3.78	21.28		7.08	10.86	31	5.73			10.47		18.39		3.78	21.28		7.08	10.86		
SEAN	6.712	12.570	12.050	75.930	81.291	21.951	11.580	4.989	21.338	8.500	10.575	9.540	16.111	SEAN	6.712	12.570	12.050	75.930	81.291	21.951	11.580	4.989	21.338	8.500	10.575	9.540	16.111
THOMAS	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	THOMAS	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	0.789	
STA AV	0.845	0.892	1.499	6.197	2.916	0.964	0.521	0.537	0.421	1.148	1.463	1.301		STA AV	0.845	0.892	1.499	6.197	2.916	0.964	0.521	0.537	0.421	1.148	1.463	1.301	

1971 SELECTED RUNOFF EVENT						NORTH DANVILLE, VERMONT WATERSHED W-1					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 23 - 24, 1971											
RG 000001											
8-23	0.0	0.000	8-23	343	0.0	0.0	8-23	19	5.659	0.0	
				359	0.0375	0.01		186	5.659	0.0008	
				419	0.1200	0.05		438	7.065	0.0025	
				433	0.1715	0.09		601	10.091	0.0036	
				444	0.2727	0.14		711	25.998	0.0056	
WATERSHED CONDITIONS: Forest land, 64%; hay, 16%; pastured land, 15%; idle land with dense grass and brush growth, 3%; seeded to corn, 1%; and homesites, 1%.											
				458	0.3000	0.21		736	37.132	0.0068	
				508	0.3600	0.27		748	37.132	0.0075	
				521	0.3231	0.34		838	73.121	0.0118	
				539	0.1666	0.39		901	60.814	0.0146	
				558	0.3158	0.49		934	91.807	0.0190	
				612	0.4714	0.60		983	94.690	0.0203	
				617	0.6000	0.65		957	94.690	0.0224	
				621	0.7898	0.70		1034	86.204	0.0276	
				628	1.2001	0.88		1200	79.499	0.0387	
				637	1.0000	0.99		1501	54.841	0.0576	
				657	0.2400	1.07		1759	38.801	0.0706	
				736	0.0462	1.10		2400	25.340	0.0886	
				818	0.0286	1.12	8-24	559	18.226	0.1008	
				837	0.1263	1.16		1200	14.251	0.1099	
				917	0.1800	1.28		1800	10.854	0.1169	
				937	0.1500	1.33					
				957	0.0900	1.36		2400	8.666	0.1224	
				1025	0.0214	1.37					
				1443	0.0	1.37					
				1501	0.0666	1.39					
				1649	0.0	1.39					
				1807	0.0462	1.45					
				2400	0.0034	1.47					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000935. For 30-day antecedent rainfall and runoff, see tables of daily values.



EVENT OF AUGUST 23 - 24, 1971  
NORTH DANVILLE, VERMONT WATERSHED W-1

## NORTH DANVILLE, VERMONT WATERSHED W-2

LOCATION: Caledonia County, Vermont; 5 mi. NW of St. Johnsbury; unnamed tributary of Sleepers River, Connecticut River basin.

AREA: 146.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NORTH DANVILLE, VERMONT WATERSHED W-2												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1968	P	1.28	1.11	3.51	3.19	4.24	4.36	2.01	2.70	2.74	2.78	4.69	5.03	37.64											
	Q	0.912	0.771	4.148	2.643	1.956	1.582	0.982	0.464	0.505	0.436	0.683	0.852	15.936											
1969	P	2.44	2.81	1.44	3.23	4.17	4.41	4.57	3.81	2.42	2.24	5.40	5.30	42.24											
	Q	0.977	0.758	1.067	9.030	3.519	1.946	1.143	1.007	0.617	0.521	1.441	1.856	23.883											
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.88	2.36	1.71	2.44	4.15	33.22											
	Q	1.292	1.959	1.141	5.260	2.347	1.071	0.448	0.356	0.273	0.353														
1971	P	2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16	38.13											
	Q				5.783	4.206	1.158	0.653	1.078	0.519	0.655	0.585													
STA AV	P	1.91	2.31	2.31	2.96	3.11	3.33	3.19	4.23	2.48	3.28	3.54	3.11	35.76											
	Q	0.835	0.816	1.977	4.281	2.303	1.114	0.643	0.514	0.390	0.650	1.066	1.236	15.825											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1968		3-23	0.065	3-23	0.062	3-23	0.120	3-23	0.294	3-23	0.584	3-23	0.693	3-22	1.080	3-17	2.624								
1969		6-13	0.255	6-13	0.144	6-13	0.181	4-18	0.292	4-18	0.564	4-18	0.951	4-17	1.475	4-13	4.652								
1970		4-17	0.056	4-24	0.053	4-24	0.103	4-24	0.257	4-24	0.386	4-24	0.490	4-16	0.707	4-12	2.176								
1971		8-3	0.110	8-3	0.096	8-3	0.145	4-20	0.236	4-20	0.367	4-20	0.518	4-19	0.965	4-19	3.196								
MAXIMUMS FOR PERIOD OF RECORD																									
		6-13	0.255	6-13	0.144	6-13	0.181	3-5	0.390	3-5	0.580	4-18	0.951	4-17	1.475	4-13	4.652								
		1969		1969		1969		1964		1964		1969		1969		1969									

NOTES: Watershed conditions: Pasture of mostly bluegrass, 38%; cultivated land entirely in clover and orchard grass hay, 37%; and forest stand, predominantly hardwoods, 25%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 67.2-4. Precipitation records began Sept. 1958. Runoff records began October 1958. Part-year values and winter-closed-down period not included in station average. Monthly Q and Maximum Volumes of runoff are revised and supersede values that were previously published in the Hydrologic Data for Experimental Agricultural Watersheds in the United States, USDA Misc. Pub. 1330 (1968); 1370 (1969) and 1390 (1970), respectively. Monthly totals not calculated for months 4-2 was closed down (Nov. 28, 1970 thru March 15, 1971). For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1971 DAILY PRECIPITATION (inches)													NORTH DANVILLE, VERMONT WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.01	0.01	0.0	0.27	0.35	0.13	0.0	0.41	0.0	0.05	0.20	0.0	3	0.04	0.0	0.25	0.18	0.69	0.12	0.0	2.50	0.0	0.0	0.0	0.15
4	0.09	0.0	0.61	0.0	0.08	0.0	0.0	0.01	0.0	0.0	0.05	0.0	5	0.0	0.30	0.14	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.02	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.18	0.0	0.35	7	0.05	0.05	0.79	0.24	0.0	0.65	0.0	0.0	0.02	0.05	0.14	
8	0.0	0.78	0.01	0.08	0.01	0.0	0.51	0.0	0.0	0.0	0.0	0.0	9	0.0	0.16	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.0	0.24	
10	0.03	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.05	11	0.07	0.0	0.21	0.30	0.0	0.0	0.30	0.0	0.02	0.0	0.09
12	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.09	0.19	0.0	13	0.0	0.51	0.0	0.0	0.30	0.0	0.35	0.0	0.06	0.01	0.0	0.04
14	0.09	0.16	0.0	0.08	0.0	0.0	0.38	0.0	0.31	0.0	0.0	0.01	15	0.04	0.01	0.09	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.39	
16	0.0	0.0	0.03	0.11	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.04	17	0.0	0.05	0.0	0.45	0.0	0.28	0.0	0.11	0.0	0.0	0.01	
18	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.06	19	0.0	0.0	0.35	0.0	0.0	0.0	0.49	0.0	0.0	0.06	0.08	
20	0.0	0.54	0.25	0.01	0.03	0.0	0.0	0.76	0.04	0.0	0.02	0.06	21	0.30	0.07	0.07	0.24	0.36	0.54	0.0	0.13	0.20	0.0	0.01	
22	0.10	0.0	0.02	0.11	0.13	0.0	0.0	0.26	0.0	0.0	0.0	0.04	23	0.16	0.62	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	0.0	
24	0.0	0.07	0.0	0.0	0.01	0.0	0.07	0.0	0.0	0.0	0.0	0.44	25	0.01	0.02	0.0	0.05	0.25	0.66	0.01	0.0	0.46	1.17	0.06	
26	0.72	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	6.01	0.08	0.02	27	0.11	0.14	0.0	0.06	0.11	0.0	0.16	0.33	0.0	0.02	0.12	
28	0.02	0.0	0.0	0.06	0.0	0.0	0.0	2.17	0.0	0.0	0.02	0.17	29	0.03	0.04	0.09	0.0	0.0	0.31	0.02	0.06	0.0	0.40	0.03	
30	0.27	0.06	0.11	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.55	0.50	31	0.03	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.08	
TOTAL	2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16	STA AV	1.91	2.31	2.31	2.96	3.11	3.33	3.19	4.23	2.48	3.28	3.54	3.11

NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from 8-10 all precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 13 yr (1959-71) record period.

1968 MEAN DAILY DISCHARGE (cfs)													NORTH DANVILLE, VERMONT WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.208	0.157	0.124	1.158	0.340	0.289	0.269	0.138	0.086	0.052	0.072	0.130	1	0.208	0.157	0.124	1.158	0.340	0.289	0.269	0.138	0.086	0.052	0.072	0.130
2	0.208	0.258	0.121	0.763	0.317	0.282	0.193	0.100	0.073	0.050	0.091	0.135	2	0.208	0.258	0.121	0.763	0.317	0.282	0.193	0.100	0.073	0.050	0.091	0.135
3	0.208	0.537	0.114	0.719	0.312	0.258	0.169	0.085	0.070	0.059	0.080	0.134	3	0.208	0.537	0.114	0.719	0.312	0.258	0.169	0.085	0.070	0.059	0.080	0.134
4	0.208	0.232	0.114	0.802	0.406	0.246	0.144	0.076	0.070	0.059	0.070	0.230	4	0.208	0.232	0.114	0.802	0.406	0.246	0.144	0.076	0.070	0.059	0.070	0.230
5	0.208	0.205	0.114	0.782	0.315	0.231	0.141	0.072	0.065	0.103	0.060	0.431	5	0.208	0.205	0.114	0.782	0.315	0.231	0.141	0.072	0.065	0.103	0.060	0.431
6	0.208	0.194	0.114	0.579	0.286	0.210	0.251	0.077	0.106	0.068	0.060	0.210	6	0.208	0.194	0.114	0.579	0.286	0.210	0.251	0.077	0.106	0.068	0.060	0.210
7	0.208	0.181	0.111	0.552	0.265	0.197	0.201	0.087	0.090	0.228	0.070	0.173	7	0.208	0.181	0.111	0.552	0.265	0.197	0.201	0.087	0.090	0.228	0.070	0.173
8	0.208	0.167	0.113	0.552	0.256	0.190	0.150	0.069	0.066	0.115	0.214	0.144	8	0.208	0.167	0.113	0.552	0.256	0.190	0.150	0.069	0.066	0.115	0.214	0.144
9	0.208	0.164	0.114	0.520	0.299	0.556	0.149	0.097	0.050	0.083	0.127	0.166	9	0.208	0.164	0.114	0.520	0.299	0.556	0.149	0.097	0.050	0.083	0.127	0.166
10	0.197	0.165	0.119	0.497	0.304	0.840	0.541	0.083	0.060	0.073	0.135	0.135	10	0.197	0.165	0.119	0.497	0.304	0.840	0.541	0.083	0.060	0.073	0.135	0.135
11	0.181	0.156	0.119	0.441	0.260	0.306	0.218	0.054	0.089	0.083	0.127	0.122	11	0.181	0.156	0.119	0.441	0.260	0.306	0.218	0.054	0.089	0.083	0.127	0.122
12	0.181	0.145	0.114	0.417	0.297	0.322	0.177	0.052	0.258	0.072	0.096	0.122	12	0.181	0.145	0.114	0.417	0.297	0.322	0.177	0.052	0.258	0.072	0.096	0.122
13	0.181	0.145	0.114	0.394	0.263	0.268	0.169	0.058	0.121	0.067	0.106	0.122	13	0.181	0.145	0.114	0.394	0.263	0.268	0.169	0.058	0.121	0.067	0.106	0.122
14	0.181	0.145	0.114	0.379	0.228	0.296	0.150	0.055	0.095	0.061	0.096	0.198	14	0.181	0.145	0.114	0.379	0.228	0.296	0.150	0.055	0.095	0.061	0.096	0.198
15	0.181	0.145	0.114	0.607	0.216	0.379	0.150	0.0442	0.086	0.057	0.087	0.172	15	0.181	0.145	0.114	0.607	0.216	0.379	0.150	0.0442	0.086	0.057	0.087	0.172
16	0.175	0.142	0.191	0.449	0.209	0.265	0.150	0.0468	0.070	0.057	0.087	0.127	16	0.175	0.142	0.191	0.449	0.209	0.265	0.150	0.0468	0.070	0.057	0.087	0.127
17	0.169	0.134	1.050	0.362	1.556	0.351	0.390	0.148	0.062	0.055	0.088	0.122	17	0.169	0.134	1.050	0.362	1.556	0.351	0.390	0.148	0.062	0.055	0.088	0.122
18	0.169	0.134	1.328	0.340	0.475	0.266	0.235	0.082	0.057	0.049	0.255	0.108	18	0.169	0.134	1.328	0.340	0.475	0.266	0.235	0.082	0.057	0.049	0.255	0.108
19	0.169	0.134	2.640	0.314	0.618	0.411	0.322	0.057	0.056	0.057	0.118	0.112	19	0.169	0.134	2.640	0.314	0.618	0.411	0.322	0.057	0.056	0.057	0.118	0.112
20	0.169	0.134	1.703	0.309	0.966	0.371	0.207	0.275	0.049	0.131	0.35	0.130	20	0.169	0.134	1.703	0.309	0.966	0.371	0.207	0.275	0.049	0.131	0.35	0.130
21	0.169	0.129	1.521	0.308	0.425	0.255	0.188	0.184	0.045	0.047	0.101	0.108	21	0.169	0.129	1.521	0.308	0.425	0.255	0.188	0.184	0.045	0.047	0.101	0.108
22	0.169	0.114	2.588	0.307	0.604	0.284	0.128	0.075	0.049	0.0698	0.103	0.169	22	0.169	0.114	2.588	0.307	0.604	0.284	0.128	0.075	0.049	0.0698	0.103	0.169
23	0.169	0.114	3.716	0.281	0.372	0.275	0.122	0.061	0.038	0.064	0.103	0.181	23	0.169	0.114	3.716	0.281	0.372	0.275	0.122	0.061	0.038	0.064	0.103	0.181
24	0.168	0.114	3.023	0.286	0.303	0.144	0.062	0.040	0.062	0.040	0.062	0.123	24	0.168	0.114	3.023	0.286	0.303	0.144	0.062	0.040	0.062	0.040	0.062	0.123
25	0.154	0.114	0.854	0.185	0.297	0.341	0.182	0.241	0.127	0.083	0.159	0.172	25	0.154	0.114	0.854	0.185	0.297	0.341	0.182	0.241	0.127	0.083	0.159	0.172
26	0.157	0.114	0.919	0.434	0.278	0.252	0.099	0.082	0.083	0.087	0.102	0.161	26	0.157	0.114	0.919	0.434	0.278	0.252	0.099	0.082	0.083	0.087	0.102	0.161
27	0.157	0.114	1.333	0.437	0.274	0.205	0.084	0.085	0.084	0.097	0.105	0.172	27	0.157	0.114	1.333	0.437	0.274	0.205	0.084	0.085	0.084	0.097	0.105	0.172
28	0.157	0.114	1.411	0.411	0.253	0.288	0.393	0.070	0.058	0.1942	0.157	0.212	28	0.157	0.114	1.411	0.411	0.253	0.288	0.393	0.070	0.058	0.1942	0.157	0.212
29	0.157	0.130	1.199	0.364	0.305	0.480	0.181	0.077	0.057	0.129	0.557	0.228	29	0.157	0.130	1.199	0.364	0.305	0.480	0.181	0.077	0.057	0.129	0.557	0.228
30	0.157	0.167	0.356	0.356	0.327	0.108	0.364	0.054	0.059	0.059	0.185	0.181	30	0.157	0.167	0.356	0.356	0.327	0.108	0.364	0.054	0.059	0.059	0.185	0.181
31	0.157	0.1951			0.355		0.106	0.086	0.075				31	0.157	0.1951			0.355		0.106	0.086	0.075			
MEAN	0.1005	0.1631	0.8209	0.5905	0.3871	0.3235	0.1943	0.0918	0.1033	0.0863	0.1397	0.1686	MEAN	0.1005	0.1631	0.8209	0.5905	0.3871	0.3235	0.1943	0.0918	0.1033	0.0863	0.1397	0.1686
1 INCHES	0.712	0.771	4.148	2.643	1.987	1.956	0.982	0.436	0.505	0.463	0.63	0.82	1 INCHES	0.712	0.771	4.148	2.643	1.987	1.956	0.982	0.436	0.505	0.463	0.63	0.82
STA AV	0.975	0.707	2.152	3.558	1.987	1.031	0.611	0.424	0.366	0.692	1.076	1.174	STA AV	0.975	0.707	2.152	3.558	1.987	1.031	0.611	0.424	0.366	0.692	1.076	1.174

1969 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.169	0.204	0.157	0.237	0.904	0.367	0.180	0.165	0.098	0.075	0.087	0.230
2	0.169	0.194	0.157	0.276	0.789	0.361	0.164	0.174	0.108	0.088	0.124	0.237
3	0.169	0.194	0.157	0.241	0.750	0.515	0.199	0.285	0.100	0.262	0.196	0.223
4	0.169	0.189	0.157	0.359	0.668	0.358	0.184	0.201	0.092	0.107	0.879	0.234
5	0.169	0.170	0.157	0.513	0.611	0.133	0.176	0.676	0.088	0.092	0.743	0.224
6	0.169	0.169	0.157	0.732	0.574	0.438	0.146	0.236	0.272	0.088	0.420	0.222
7	0.169	0.169	0.157	0.687	0.616	0.365	0.148	0.174	0.348	0.087	0.285	0.223
8	0.169	0.169	0.145	0.746	0.843	0.313	0.138	0.266	0.235	0.087	0.367	0.278
9	0.169	0.169	0.145	0.822	0.941	0.277	0.145	0.215	0.216	0.076	0.234	0.430
10	0.169	0.169	0.142	1.855	0.611	0.256	0.156	0.365	0.136	0.071	0.216	0.325
11	0.169	0.169	0.134	1.887	0.960	0.244	0.164	0.213	0.120	0.071	0.272	1.260
12	0.169	0.169	0.134	1.647	0.640	0.235	0.275	0.154	0.113	0.071	0.236	0.425
13	0.169	0.169	0.134	2.685	0.607	1.526	0.182	0.198	0.098	0.071	0.376	0.376
14	0.169	0.160	0.134	3.544	0.653	0.392	0.136	0.1352	0.096	0.083	0.296	0.294
15	0.169	0.157	0.134	3.617	0.557	1.102	0.129	0.103	0.094	0.071	0.333	0.303
16	0.169	0.157	0.134	3.209	0.507	0.655	0.114	0.093	0.092	0.071	0.229	0.285
17	0.169	0.154	0.142	3.519	0.484	0.351	0.101	0.346	0.234	0.072	0.217	0.264
18	0.169	0.145	0.158	4.186	0.562	0.113	0.1008	0.191	0.124	0.083	0.222	0.268
19	0.169	0.145	0.205	4.859	0.966	0.293	0.090	0.218	0.101	0.071	0.228	0.283
20	0.169	0.154	0.255	2.598	2.462	0.424	0.093	0.142	0.093	0.228	0.709	0.278
21	0.169	0.161	0.260	2.329	0.697	0.283	0.094	0.122	0.092	0.173	0.258	0.279
22	0.169	0.160	0.228	2.064	0.589	0.250	0.213	0.118	0.090	0.124	0.230	0.307
23	0.169	0.157	0.230	2.338	0.569	0.353	0.135	0.094	0.087	0.107	0.230	0.522
24	0.252	0.157	0.279	1.979	0.558	0.278	0.112	0.078	0.085	0.105	0.242	0.368
25	0.374	0.166	0.524	1.558	0.610	0.308	0.099	0.167	0.122	0.139	0.221	0.285
26	0.229	0.158	0.429	1.386	0.511	0.264	0.186	0.159	0.102	0.131	0.2178	0.307
27	0.195	0.157	0.333	1.383	0.491	0.244	0.128	0.1298	0.101	0.126	0.2228	1.234
28	0.175	0.157	0.288	1.419	0.527	0.333	0.401	0.104	0.089	0.098	0.2228	0.408
29	0.169	0.157	0.328	1.898	0.467	0.207	0.033	0.096	0.078	0.086	0.2228	0.361
30	0.294	0.157	0.294	1.057	0.485	0.202	0.340	0.125	0.082	0.094	0.2228	0.356
31	0.421	0.255	0.255		0.386		0.256	0.097		0.086		0.339
MEAN	0.1934	0.1660	0.2110	1.8464	0.6964	0.3979	0.2261	0.1993	0.1262	0.1031	0.2947	0.3673
INCHES	0.977	0.758	1.067	9.030	3.519	1.946	1.143	1.007	0.617	0.521	1.441	1.856
STA AV	0.794	0.712	2.053	4.056	2.126	1.114	0.660	0.477	0.388	0.676	1.110	1.236

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.1630250. Runoff values are revised and super-seeded values previously published for 1969. STA AV based on 11 yr (1959-1969) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.320	0.208	0.222	0.269	0.640	0.301	0.2258	0.122	0.058	0.055	0.045	NR
2	0.314	0.668E	0.222	0.614	0.626	0.256	0.163E	0.157	0.041	0.051	0.045	NR
3	0.305	2.705E	0.222	0.632	0.622	0.229	0.160E	0.079	0.055	0.132	0.045	NR
4	0.303	0.809E	0.210	0.392	0.602	0.204	0.226E	0.051	0.262	0.050	0.045	NR
5	0.286	0.423E	0.208	0.350	0.547	0.600	0.217E	0.052	0.120	0.065	0.045	NR
6	0.285	0.361	0.208	0.346E	0.577	0.576	0.119E	0.043	0.086	0.054	0.041	NR
7	0.285	0.334	0.207	0.424	0.493	0.279	0.096E	0.034	0.065	0.049	0.040	NR
8	0.285	0.315	0.194	0.539	0.465	0.225	0.080E	0.030	0.056	0.048	0.040	NR
9	0.269	0.303	0.194	1.536	0.448	0.199	0.080E	0.025	0.049	0.044	0.037	NR
10	0.269	0.309	0.194	0.847	0.544	0.185	0.077E	0.025	0.037	0.039	0.049	NR
11	0.269	0.703	0.194	0.715	0.555	0.167E	0.107E	0.032	0.022	0.060	0.100	NR
12	0.261	0.460	0.194	1.256	0.466	0.181	0.077E	0.037	0.011	0.054	0.069	NR
13	0.267	0.373	0.192	1.282	0.413	0.154	0.063E	0.030	0.007	0.056	0.062	NR
14	0.253	0.317	0.181	1.785	0.373	0.148	0.072E	0.027	0.010	0.089	0.057	NR
15	0.253	0.303	0.181	1.934	0.346	0.135E	0.073E	0.024	0.019	0.148	0.135	NR
16	0.241	0.303	0.181	1.706	0.385	0.111E	0.109E	0.021	0.056	0.100	0.134	NR
17	0.237	0.293	0.181	2.216	0.216	0.137	0.086E	0.020	0.020	0.077	0.091	NR
18	0.237	0.285	0.181	1.864	0.490	0.149E	0.093E	0.018	0.050	0.066	0.079	NR
19	0.237	0.285	0.191	1.198	0.394	0.129	0.079E	0.021	0.047	0.059	0.088	NR
20	0.237	0.281	0.205	1.250	0.348	0.124	0.053E	0.024	0.035	0.052	0.082	NR
21	0.225	0.269	0.243	1.294	0.308	0.115	0.050E	0.020	0.034	0.051	0.167	NR
22	0.222	0.269E	0.280	1.038	0.362	0.126E	0.063E	0.036	0.063	0.059	0.086	NR
23	0.211	0.269E	0.270	0.918	0.330	0.103E	0.052	0.313	0.038	0.176	0.111	NR
24	0.208	0.251	0.308E	2.811	0.282	0.079E	0.049	0.096	0.032	0.089	0.070	NR
25	0.208	0.237	0.275	1.172	0.299	0.080E	0.045	0.060	0.054	0.073	0.064	NR
26	0.208	0.237	0.241	0.891	0.509	0.084E	0.043	0.046	0.049	0.066	0.064	NR
27	0.208	0.223	0.368	0.835	0.378	0.567E	0.037	0.057	0.084	0.061	0.032	NR
28	0.208	0.222	0.287	0.777	0.316	0.169E	0.035	0.089	0.063	0.041	NR	NR
29	0.214	0.275E	0.707	0.311	0.122E	0.036	0.138	0.088	0.0	NR	NR	NR
30	0.278	0.249	0.669	0.299	0.635E	0.034	0.070	0.068	0.112	NR	NR	NR
31	0.229	0.237	0.267		0.267		0.067			0.050		NR
MEAN	0.2557	0.4291	0.2257	1.0756	0.4645	0.2191	0.0886	0.0705	0.0559	0.0698		
INCHES	1.292	1.959	1.181	5.226	2.367	1.071	0.448	0.356	0.273	0.353		
STA AV	0.835	0.816	1.977	4.156	2.144	1.111	0.642	0.467	0.379	0.649	1.110	1.236

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.1630250. Runoff values are revised and super-seeded values previously published for 1970. W-2 closed for water operation beginning Nov. 28, 1970 thru March 15, 1971. Daily values for this period are denoted by 'NR'. STA AV based on 12 yr (1959-70) record period (winter closed down months not included).

1971 MEAN DAILY DISCHARGE (cfs)												NORTH DANVILLE, VERMONT WATERSHED W-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	NR	NR	NR	NR	0.138	1.395	0.313	0.684	0.104	0.109	0.075	0.095	NR										
2	NR	NR	NR	NR	0.173	1.513	0.307	0.415	0.187	0.097	0.088	0.136	NR										
3	NR	NR	NR	NR	0.476	2.473	0.400	0.137	1.579	0.096	0.090	0.125	NR										
4	NR	NR	NR	NR	0.279	1.685	0.315	0.117	0.265	0.096	0.075	0.114	NR										
5	NR	NR	NR	NR	0.245	1.352	0.276	0.106	0.139	0.096	0.0752	0.107	NR										
6	NR	NR	NR	NR	0.269	1.133	0.268	0.117	0.111	0.092	0.114	0.105	NR										
7	NR	NR	NR	NR	0.244	1.001	0.332	0.104	0.089	0.088	0.110	0.244	NR										
8	NR	NR	NR	NR	0.202	0.931	0.609	0.087	0.075	0.080	0.092	0.137	NR										
9	NR	NR	NR	NR	0.252	0.949	0.317	0.084	0.064	0.075	0.109	0.109	NR										
10	NR	NR	NR	NR	0.455	0.842	0.249	0.071	0.058	0.069	0.112	0.106	NR										
11	NR	NR	NR	NR	0.965	0.777	0.229	0.063	0.110	0.074	0.245	0.131	NR										
12	NR	NR	NR	NR	0.822	0.758	0.222	0.060	0.071	0.164	0.144	0.129	NR										
13	NR	NR	NR	NR	0.635	0.871	0.207	0.087	0.052	0.128	0.134	0.132	NR										
14	NR	NR	NR	NR	0.573	0.744	0.188	0.211	0.043	0.185	0.122	0.112	NR										
15	NR	NR	NR	NR	0.522	0.655	0.188	0.110	0.044	0.153	0.119	0.105	NR										
16	NR	NR	NR	NR	0.136	0.498	0.639	0.185	0.091	0.049	0.103	0.100	NR										
17	NR	NR	NR	NR	0.192	0.724	0.757	0.168	0.132	0.045	0.184	0.109	NR										
18	NR	NR	NR	NR	0.158	1.277	0.607	0.159	0.113	0.035	0.154	0.101	NR										
19	NR	NR	NR	NR	0.146	2.562	0.552	0.166	0.032	0.108	0.095	0.141	NR										
20	NR	NR	NR	NR	0.137	3.012	0.513	0.140	0.162	0.098	0.101	0.151	NR										
21	NR	NR	NR	NR	0.134	2.851	0.661	0.278	0.090	0.094	0.153	0.162	NR										
22	NR	NR	NR	NR	0.134	2.651	0.683	0.197	0.075	0.107	0.107	0.101	NR										
23	NR	NR	NR	NR	0.134	2.033	0.504	0.150	0.063	0.524	0.094	0.095	NR										
24	NR	NR	NR	NR	0.134	2.401	0.457	0.138	0.068	0.110	0.088	0.052	NR										
25	NR	NR	NR	NR	0.137	2.226	0.503	0.253	0.073	0.081	0.084	0.199	NR										
26	NR	NR	NR	NR	0.134	1.990	0.584	0.222	0.057	0.070	0.079	0.167	NR										
27	NR	NR	NR	NR	0.134	1.930	0.489	0.170	0.076	0.105	0.076	0.125	NR										
28	NR	NR	NR	NR	0.134	1.797	0.473	0.163	0.056	1.718	0.078	0.111	NR										
29	NR	NR	NR	NR	0.137	1.841	0.394	0.162	0.095	0.241	0.092	0.104	NR										
30	NR	NR	NR	NR	0.137	1.833	0.366	0.1582	0.093	0.177	0.081	0.104	NR										
31	NR	NR	NR	NR	0.134		0.337	0.142	0.134		0.101		NR										
MEAN					1.1824	0.8323	0.2369	0.1292	0.2132	0.1061	0.1297	0.1197											
INCHES					5.783	4.206	1.158	0.653	1.078	0.519	0.655	0.585											
STA AV	0.835	0.816	1.977	4.281	2.303	1.114	0.643	0.514	0.390	0.650	1.066	1.236											

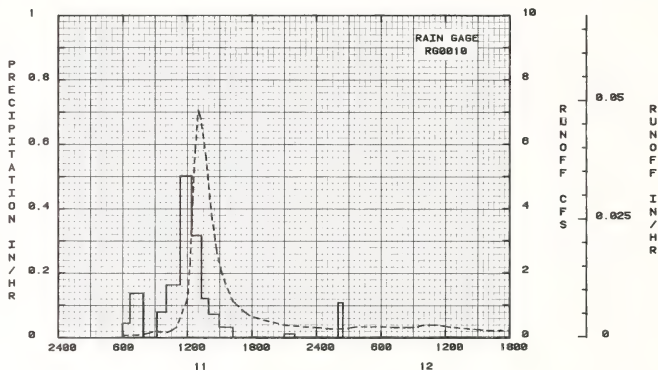
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.1610205. W-2 closed for winter operation beginning Nov. 28, 1970 thru March 15, 1971. Daily values for this period are denoted by "NR". STA AV based on 13 yr (1959-1971) record period (winter closed down months not included).

1968 SELECTED RUNOFF EVENT						NORTH DANVILLE, VERMONT WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 11 - 13, 1968											
RG RG0010			RG RG0010								
9-11	0.0	0.002	9-11	558	0.0	0.0	9-11	600	0.057	0.0	
				639	0.0439	0.03		700	0.070	0.0004	
				753	0.1378	0.20		800	0.103	0.0010	
				910	0.0	0.20		845	0.168	0.0017	
				1003	0.0792	0.27		1015	0.168	0.0034	
WATERSHED CONDITIONS:											
Pasture or mostly bluegrass											
30%; cultivated land entirely											
in clover and orchard grass											
hay, 37%, and forest stand,											
predominantly hardwoods, 25%.											
				1614	0.0316	1.49		1300	7.061	0.0385	
				2059	0.0	1.49		1315	6.782	0.0503	
				2159	0.100	1.50		1345	5.496	0.0712	
			9-12	200	0.0	1.50		1415	3.786	0.0870	
				228	0.1071	1.55		1445	2.610	0.0979	
								1515	1.936	0.1056	
								1545	1.486	0.1114	
								1615	1.111	0.1158	
								1645	0.949	0.1193	
								1715	0.803	0.1223	
								1745	0.672	0.1248	
								1815	0.613	0.1270	
								2100	0.365	0.1361	
								2400	0.288	0.1428	
							9-12	130	0.254	0.1456	
								230	0.254	0.1473	
								345	0.325	0.1498	
								600	0.325	0.1548	
								715	0.288	0.1574	
								900	0.288	0.1608	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. Runoff values are revised and superseded values previously published for 1968. For 30-day antecedent rainfall and runoff, see tables of daily amounts.

1968 SELECTED RUNOFF EVENT						NORTH DAVILLE, VERMONT WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 11 - 13, 1968 (CONTINUED)											
							9-12	1000	0.365	0.1630	
								1115	0.365	0.1661	
								1200	0.325	0.1679	
								1500	0.223	0.1735	
								1630	0.194	0.1756	
								1815	0.194	0.1779	
								2400	0.168	0.1850	
								600	0.144	0.1914	
								1200	0.103	0.1964	
								1800	0.103	0.2006	
								2400	0.103	0.2048	

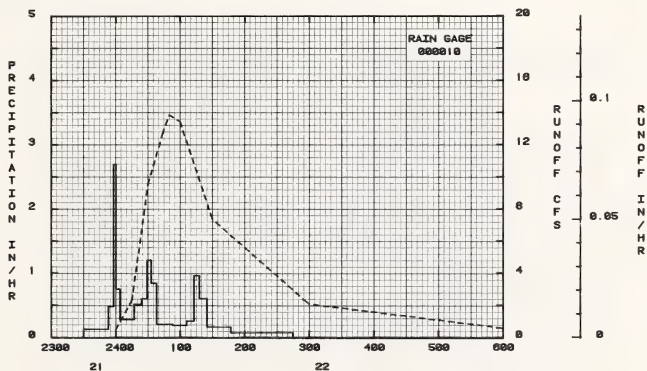
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. Runoff values are revised and supersede values previously published for 1968. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF SEPTEMBER 11 - 13, 1968  
NORTH DAVILLE, VERMONT WATERSHED W-2

1969 SELECTED RUNOFF EVENT						NORTH DAVILLE, VERMONT WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(Inches)	(Inches)	No-Day	of Day	(lb/hr)	(Inches)	No-Day	of Day	(cfs)	(Inches)	
EVENT OF JULY 21 - 22, 1969											
RG 000010			RG 000010								
7-21	0.0	0.015	7-21	2330	0.0	0.0	7-21	2400	0.504	0.0	
				2353	0.1304	0.05	7-22	15	2.325	0.0024	
				2358	0.4799	0.09		30	9.560	0.0125	
				2400	2.6998	0.18		45	12.984	0.0316	
			7-22	4	0.7498	0.23		50	13.839	0.0391	
WATERSHED CONDITIONS:											
Pasture or mostly bluegrass				17	0.2770	0.29		100	13.407	0.0546	
38% cultivated land entirely				24	0.5183	0.35		130	7.347	0.0898	
in clover and orchard grass				29	0.6000	0.40		300	2.040	0.1377	
hay, 37% and forest stand,				33	1.1998	0.48		600	0.556	0.1644	
predominantly hardwoods, 25%.				38	0.8401	0.55		1200	0.325	0.1824	
				53	0.2000	0.60		1245	0.253	0.1839	
				106	0.1846	0.64					
				113	0.2571	0.67					
				118	0.9600	0.75					
				125	0.6001	0.82					
				147	0.1636	0.88					
				212	0.0720	0.91					
				245	0.0727	0.95					

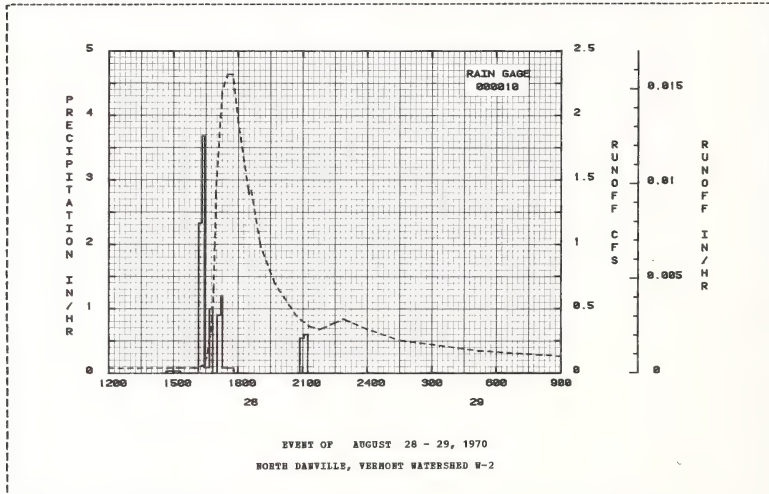
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. Runoff values are revised and supersede values previously published for 1969. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF JULY 21 - 22, 1969  
NORTH DAVILLE, VERMONT WATERSHED W-2

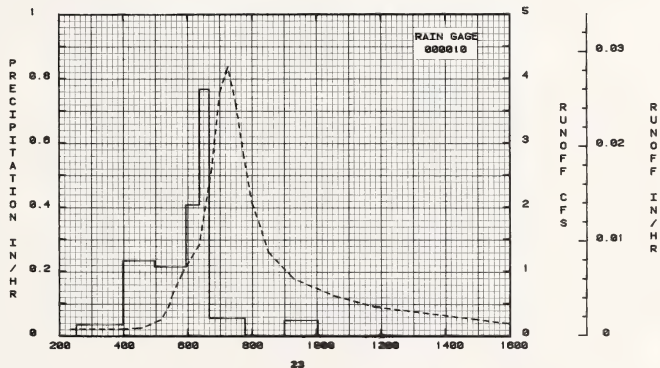
1970 SELECTED RUNOFF EVENT			NORTH DAVILLE, VERMONT WATERSHED W-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
EVENT OF AUGUST 28 - 29, 1970								
RG 000010			RG 000010					
8-28	0.0	0.003	8-28	1440	0.0	0.0	8-28	1200
				1520	0.0300	0.02		1520
				1610	0.0	0.02		1610
				1619	2.3332	0.37		1616
				1626	3.6861	0.80		1621
WATERSHED CONDITIONS:								
Pasture or mostly bluegrass								
38%; cultivated land entirely								
in clover and orchard grass								
hay, 37%; and forest stand,								
predominantly hardwoods, 25%.								
				1641	0.0800	0.82		1626
				1650	0.9999	0.97		1633
				1702	0.0	0.97		1640
				1712	0.9000	1.12		1649
				1717	1.2000	1.22		1652
				1749	0.0750	1.26		1655
				2052	0.0	1.26		1658
				2103	0.5855	1.36		1715
				2114	0.5999	1.47		1730
								1745
								1800
								1830
								1836
								1903
								1943
								2043
								2119
								2147
								2205
								2219
								2239
								2253
								2309
								2400
								2400
								510
								754
								1139
								1530
								1850
								2400
								0.078
								0.0661

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. Runoff values are revised and supersede values previously published for 1970. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



1971 SELECTED RUNOFF EVENT						NORTH DAVILLE, VERMONT WATERSHED N-2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 23, 1971											
RG 000010			RG 000010								
8-23	0.0	0.002	8-23	232	0.0	0.0	8-23	221	0.104	0.0	
				359	0.0345	0.05		359	0.104	0.0012	
				456	0.2339	0.28		434	0.124	0.0017	
				557	0.2116	0.49		509	0.237	0.0024	
				622	0.4080	0.66		524	0.440	0.0030	
WATERSHED CONDITIONS:				640	0.7667	0.89		534	0.693	0.0036	
Pasture or mostly bluegrass				747	0.0537	0.95		553	1.017	0.0054	
38%; cultivated land entirely				900	0.0	0.95		622	1.418	0.0094	
in clover and orchard grass				1003	0.0476	1.00		645	2.610	0.0146	
hay, 37%; and forest stand,								700	3.786	0.0200	
predominantly hardwoods, 25%.								715	4.175	0.0268	
								730	3.601	0.0334	
								745	2.761	0.0388	
								800	2.060	0.0429	
								815	1.701	0.0461	
								831	1.290	0.0488	
								918	0.879	0.0546	
								1035	0.630	0.0611	
								1150	0.440	0.0656	
								1453	0.253	0.0728	
								1859	0.181	0.0788	
								2142	0.157	0.0819	
								2215	0.157	0.0825	
								2226	0.169	0.0827	
								2400	0.145	0.0844	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF AUGUST 23, 1971  
NORTH DAVILLE, VERMONT WATERSHED N-2

## NORTH DARTVILLE, VERMONT WATERSHED W-3

LOCATION: Caledonia County, Vermont; 7.5 mi. NW of St. Johnsbury; Pope Brook, Sleepers River, Connecticut River Basin.

AREA: 2067.00 acres 3.23 sq. miles

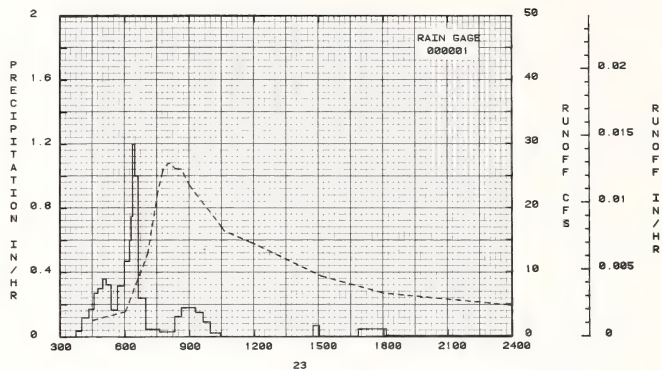
MONTHLY PRECIPITATION AND RUNOFF (inches)														NORTH DARTVILLE, VERMONT WATERSHED W-3																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971 P	3.09	4.88	4.91	3.82	4.29	2.83	5.03	10.72	1.85	3.06	4.55	3.95	52.98																		
Q	0.691	0.741	0.947	4.829	7.193	1.290	0.672	1.641	0.967	1.035	0.920	1.271	22.196																		
STA AV P	2.77	3.46	3.41	3.71	3.82	4.03	3.82	5.03	3.16	4.06	4.65	3.99	45.90																		
Q	1.003	0.915	1.492	6.562	4.073	1.519	0.901	0.875	0.720	1.156	1.466	1.338	22.020																		
ANNUAL MAXIMUM DISCHARGE (10/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge				1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days			
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1971	8-3	0.051	8-3	0.048	8-28	0.089	8-28	0.209	8-28	0.368	5-3	0.564	5-2	1.039	5-2	3.429															
MAXIMUMS FOR PERIOD OF RECORD																															
5-20	0.076	4-21	0.070	4-21	0.130	4-14	0.320	4-14	0.590	4-15	1.080	4-16	1.860	4-20	4.440																
1969		1963		1963		1964		1964		1964		1964		1964																	

NOTES: Watershed conditions: Forest, predominantly hardwoods, 67%; pasture of mostly bluegrass, 15%; cultivated land consisting of clover, orchard grass, and timothy hay with very small areas in row crops, 11%; and idle land in tall grasses and woody plants, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 67.3-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1971 DAILY PRECIPITATION (inches)													NORTH DARTVILLE, VERMONT WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.01	0.03	0.02	0.0	0.0	1.26	0.0	0.0	0.0	0.0	0.0													
2	0.02	0.07	0.28	0.43	0.11	0.0	0.56	0.0	0.25	0.30	0.02														
3	0.13	0.0	0.37	0.10	1.01	0.09	0.0	2.74	0.0	0.0	0.25														
4	0.0	0.01	1.15	0.04	0.24	0.01	0.0	0.01	0.0	0.0	0.06	0.0													
5	0.11	0.47	0.25	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.10	0.0													
6	0.0	0.03	0.05	0.0	0.0	0.0	0.19	0.0	0.0	0.15	0.0	0.10													
7	0.19	0.08	0.95	0.28	0.0	0.69	0.0	0.0	0.0	0.08	0.36	0.15													
8	0.0	0.17	0.92	0.0	0.01	0.77	0.0	0.0	0.0	0.08	0.20	0.01													
9	0.0	0.39	0.04	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.31													
10	0.04	0.04	0.0	0.70	0.0	0.0	0.0	0.0	0.0	1.55	0.06	0.06													
11	0.07	0.01	0.31	0.55	0.0	0.0	0.0	0.41	0.0	0.08	0.13	0.08													
12	0.0	0.15	0.05	0.0	0.0	0.0	0.0	0.58	0.0	0.16	0.06	0.0													
13	0.0	0.51	0.0	0.0	0.35	0.0	0.37	0.0	0.07	0.0	0.0	0.09													
14	0.0	0.28	0.0	0.13	0.01	0.0	0.99	0.0	0.33	0.0	0.0	0.03													
15	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.27													
16	0.0	0.0	0.07	0.43	0.0	0.0	0.17	0.0	0.01	0.0	0.0	0.25													
17	0.0	0.02	0.0	0.0	0.10	0.0	0.56	0.0	0.04	0.0	0.0	0.03													
18	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.08													
19	0.0	0.0	0.48	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.15	0.05													
20	0.0	0.58	0.38	0.0	0.02	0.0	0.83	0.10	0.0	0.06	0.05														
21	0.32	0.08	0.30	0.23	0.43	0.50	0.0	0.19	0.40	0.0	0.06	0.07													
22	0.14	0.0	0.01	0.47	0.14	0.0	0.0	0.14	0.0	0.0	0.0	0.07													
23	0.83	0.0	0.05	0.0	0.0	0.0	0.0	1.47	0.0	0.0	0.0	0.0													
24	0.02	0.05	0.0	0.0	0.02	0.01	0.09	0.0	0.0	0.0	0.42	0.0													
25	0.0	0.0	0.0	0.09	0.76	0.65	0.02	0.0	0.09	1.53	0.19														
26	1.15	0.0	0.0	0.02	0.20	0.0	0.0	0.0	0.0	0.02	0.15	0.05													
27	0.27	0.11	0.0	0.04	0.27	0.0	0.39	0.43	0.0	0.0	0.04	0.14													
28	0.05	0.10	0.0	0.06	0.0	0.0	0.0	3.66	0.0	0.0	0.04	0.20													
29	0.05	0.02	0.0	0.10	0.0	0.0	0.07	0.10	0.0	0.0	0.57	0.07													
30	0.29	0.17	0.23	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.68	0.62													
31	0.03				0.0		0.20	0.0			0.09														
TOTAL	3.09	4.88	4.91	3.82	4.29	2.83	5.03	10.72	1.85	3.06	4.55	3.95													
STA AV	2.77	3.46	3.41	3.71	3.82	4.03	3.82	5.03	3.16	4.06	4.65	3.99													

NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gauge R-01. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 13 yr (1959-71) record period.





## NORTH DANVILLE, VERMONT WATERSHED W-4

LOCATION: Caledonia County, Vermont; 4.7 mi. NW of St. Johnsbury; Morrill Brook, Sleepers River, Connecticut River Basin.

AREA: 10752.00 acres 16.80 sq. miles

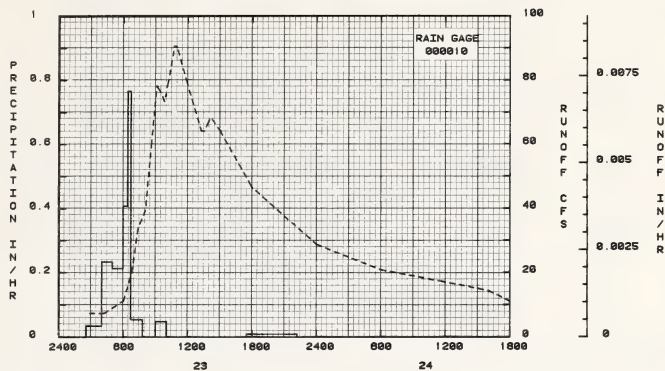
MONTHLY PRECIPITATION AND RUNOFF (inches)													NORTH DANVILLE, VERMONT WATERSHED W-4																		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971	P	2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16	38.13																	
	Q	0.466	0.570	0.804	4.934	6.725	1.085	0.464	1.441	0.712	0.789	0.693	1.015	19.698																	
STA AV	P	1.91	2.30	2.31	2.95	3.11	3.33	3.19	4.24	2.48	3.28	3.54	3.10	35.75																	
	Q	0.080	0.779	1.560	5.765	3.823	1.364	0.701	0.660	0.524	0.978	1.353	1.180	19.527																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge														Maximum Volume for Selected Time Interval																	
1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days																			
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date				
1971	8-28	0.039	8-28	0.038	8-28	0.076	8-28	0.200	8-28	0.323	5-3	0.550	5-3	0.992	5-2	3.120															
MAXIMUMS FOR PERIOD OF RECORD																															
5-20		0.061		5-20		0.061		5-20		0.118		5-20		0.310		4-19		0.522		4-18		0.900		4-17		1.485		4-14		4.323	
1969		1969		1969		1969		1969		1969		1969		1969		1969		1969		1969		1969		1969		1969		1969			

NOTES: Forest, 74%; cultivated, 12%; pasture, 12%; and idle, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 67. 4-19. Precipitation records began 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1971 DAILY PRECIPITATION (inches)													NORTH DANVILLE, VERMONT WATERSHED W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.77	0.09	0.0	0.0	0.0	0.0													
2	0.01	0.01	0.0	0.27	0.35	0.13	0.0	0.41	0.0	0.05	0.20	0.0													
3	0.04	0.0	0.25	0.14	0.69	0.12	0.0	2.50	0.0	0.0	0.0	0.15													
4	0.09	0.0	0.61	0.0	0.08	0.0	0.0	0.01	0.0	0.0	0.05	0.0													
5	0.0	0.30	0.14	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.02	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.18	0.0	0.35													
7	0.05	0.05	0.79	0.24	0.0	0.65	0.0	0.0	0.0	0.02	0.05	0.14													
8	0.0	0.78	0.04	0.01	0.01	0.51	0.0	0.0	0.0	0.0	0.0	0.02													
9	0.0	0.16	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.10	0.0	0.24													
10	0.03	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.05													
11	0.07	0.0	0.21	0.30	0.0	0.0	0.0	0.30	0.0	0.02	0.0	0.09													
12	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.09	0.19	0.0													
13	0.0	0.51	0.0	0.0	0.30	0.0	0.35	0.0	0.06	0.01	0.0	0.04													
14	0.16	0.09	0.0	0.04	0.0	0.0	0.34	0.0	0.31	0.0	0.0	0.01													
15	0.04	0.01	0.09	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.0	0.39													
16	0.0	0.0	0.03	0.11	0.0	0.0	0.10	0.0	0.0	0.0	0.04	0.0													
17	0.0	0.05	0.0	0.0	0.45	0.0	0.28	0.0	0.11	0.0	0.0	0.01													
18	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.06													
19	0.0	0.0	0.35	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.06	0.04													
20	0.0	0.54	0.25	0.01	0.03	0.0	0.0	0.76	0.04	0.0	0.02	0.06													
21	0.30	0.07	0.07	0.24	0.36	0.54	0.0	0.13	0.20	0.0	0.04	0.01													
22	0.10	0.0	0.02	0.11	0.13	0.0	0.0	0.26	0.0	0.0	0.0	0.04													
23	0.16	0.62	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0													
24	0.0	0.07	0.0	0.0	0.01	0.0	0.07	0.0	0.0	0.0	0.0	0.44													
25	0.01	0.02	0.0	0.05	0.25	0.66	0.01	0.0	0.0	0.46	1.17	0.06													
26	0.72	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.08	0.02													
27	0.11	0.14	0.0	0.06	0.11	0.0	0.16	0.33	0.0	0.0	0.02	0.12													
28	0.02	0.0	0.0	0.06	0.0	0.0	0.0	2.17	0.0	0.0	0.02	0.17													
29	0.03	0.08	0.09	0.0	0.0	0.31	0.0	0.02	0.06	0.0	0.40	0.03													
30	0.27	0.06	0.11	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.55	0.50													
31	0.03	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.08	0.0													
TOTAL	2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16													
STA AV	1.91	2.30	2.31	2.95	3.11	3.33	3.19	4.24	2.48	3.28	3.54	3.10													

NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage R-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 13 yr (1959-1971) record period.





EVENT OF AUGUST 23 - 24, 1971  
NORTH DANVILLE, VERMONT WATERSHED #4

## NORTH DANVILLE, VERMONT WATERSHED #5

LOCATION: Caledonia County, Vermont; 2 mi. NW of St. Johnsbury; Sleepers River, Connecticut River Basin.

AREA: 27469.00 acres 42.92 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												NORTH DANVILLE, VERMONT WATERSHED #5													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16	38.13											
	Q	0.768	1.038	1.554	6.807	7.679	1.343	0.675	2.101	1.007	1.133	1.037	1.179	26.323											
STA AV	P	1.91	2.30	2.31	2.95	3.11	3.33	3.19	4.24	2.48	3.28	3.54	3.10	35.75											
	Q	1.280	1.178	2.275	6.111	3.338	1.116	0.602	0.621	0.479	0.954	1.389	1.333	20.676											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1971		8-28	0.072	8-28	0.071	8-28	0.138	8-28	0.341	8-28	0.524	5-3	0.723	5-2	1.273	5-1	3.720								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-20	0.080	5-20	0.077	5-20	0.146	5-20	0.351	5-20	0.574	4-18	0.861	4-17	1.368	4-13	3.928								
		1969		1969		1969		1969		1969		1969		1969		1969									

NOTES: Watershed conditions: Forest predominantly hardwoods, 67%; cultivated land consisting of mostly clover, orchard grass, and timothy hay with very little in row crops, 17%; pasture of mostly bluegrass, 13%; idle land in tall grasses and woody plants, 2%; and homesites and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 67-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

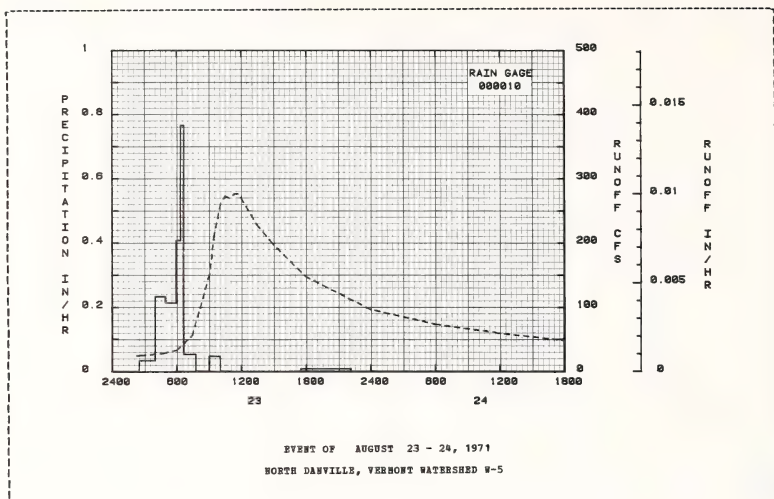
1971 DAILY PRECIPITATION (inches)													NORTH DANVILLE, VERMONT WATERSHED #5												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.77	0.09	0.77	0.09	0.0	0.0	0.0	0.77											
2	0.01	0.01	0.0	0.0	0.27	0.35	0.13	0.0	0.41	0.0	0.05	0.20	0.0												
3	0.04	0.0	0.25	0.14	0.69	0.12	0.0	2.50	0.0	0.0	0.0	0.0	0.15												
4	0.09	0.0	0.61	0.0	0.08	0.0	0.0	0.01	0.0	0.0	0.0	0.05	0.0												
5	0.0	0.30	0.14	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
6	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.35												
7	0.05	0.05	0.79	0.24	0.0	0.65	0.0	0.0	0.0	0.0	0.18	0.02	0.05	0.14											
8	0.0	0.78	0.04	0.01	0.01	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.02											
9	0.0	0.16	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.10	0.0	0.24	0.0											
10	0.03	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.05	0.0											
11	0.07	0.0	0.21	0.30	0.0	0.0	0.0	0.0	0.30	0.0	0.02	0.0	0.09	0.0											
12	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.09	0.19	0.0	0.0											
13	0.0	0.51	0.0	0.0	0.30	0.0	0.0	0.35	0.0	0.06	0.01	0.0	0.04	0.0											
14	0.16	0.09	0.0	0.04	0.0	0.0	0.0	0.34	0.0	0.31	0.0	0.0	0.01	0.0											
15	0.04	0.01	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.0	0.39	0.0											
16	0.0	0.0	0.03	0.11	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.04	0.0											
17	0.0	0.05	0.0	0.0	0.45	0.0	0.0	0.28	0.0	0.11	0.0	0.0	0.01	0.0											
18	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.06	0.0											
19	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.06	0.04	0.0											
20	0.0	0.54	0.25	0.01	0.03	0.0	0.0	0.0	0.76	0.04	0.0	0.02	0.06	0.0											
21	0.30	0.07	0.07	0.24	0.36	0.54	0.0	0.0	0.13	0.20	0.0	0.0	0.04	0.01											
22	0.10	0.0	0.02	0.11	0.13	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.04	0.0											
23	0.16	0.62	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0											
24	0.07	0.0	0.0	0.0	0.01	0.0	0.0	0.07	0.0	0.0	0.0	0.44	0.03	0.0											
25	0.01	0.02	0.0	0.05	0.25	0.66	0.01	0.0	0.0	0.0	0.46	1.17	0.06	0.0											
26	0.72	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.08	0.02	0.0											
27	0.11	0.14	0.0	0.06	0.11	0.0	0.0	0.16	0.33	0.0	0.0	0.02	0.12	0.0											
28	0.02	0.0	0.0	0.06	0.0	0.0	0.0	0.0	2.17	0.0	0.0	0.0	0.02	0.17											
29	0.03	0.04	0.09	0.0	0.0	0.0	0.31	0.02	0.06	0.0	0.40	0.03	0.0	0.0											
30	0.27	0.06	0.11	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.55	0.50	0.0											
31	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.08	0.0											
TOTAL		2.28	3.53	2.95	2.58	3.00	2.61	3.46	8.21	1.36	2.14	2.85	3.16												
STA AV		1.91	2.30	2.31	2.95	3.11	3.33	3.19	4.24	2.48	3.28	3.54	3.10												

NOTES: For temperature data see table of maximums and minimums values included with information for Watershed 67.001. Daily precipitation values from rain gage R-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 13 yr (1959-1971) record period.

1971 MEAN DAILY DISCHARGE (cfs)												NORTH DANVILLE, VERMONT WATERSHED W-5											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	32.15	26.91	62.31	51.71	440.02	72.15	66.17	26.49	53.32	23.12	32.91	23.12	32.15	26.91	62.31	51.71	440.02	72.15	66.17	26.49	53.32	23.12	32.91
2	32.15	25.90	50.43	55.08	426.89	65.24	82.90	41.81	44.10	21.66	38.53	26.25	32.15	25.90	50.43	55.08	426.89	65.24	82.90	41.81	44.10	21.66	38.53
3	32.15	25.02	47.35	108.78	802.62	80.93	36.68	370.34	40.12	23.88	48.01	26.13	32.15	25.02	47.35	108.78	802.62	80.93	36.68	370.34	40.12	23.88	48.01
4	32.15	24.70	48.20	162.37	678.96	72.04	25.72	191.61	37.93	21.69	40.18	26.16	32.15	24.70	48.20	162.37	678.96	72.04	25.72	191.61	37.93	21.69	40.18
5	32.73	24.89	47.53	104.58	524.63	61.49	21.14	67.40	37.42	21.40	37.84	26.33	32.73	24.89	47.53	104.58	524.63	61.49	21.14	67.40	37.42	21.40	37.84
6	36.74	24.70	43.33	95.61	499.68	55.50	20.28	41.51	37.01	23.16	36.19	28.35	36.74	24.70	43.33	95.61	499.68	55.50	20.28	41.51	37.01	23.16	36.19
7	36.33	24.70	43.18	94.34	504.87	52.70	22.58	30.84	34.52	30.79	68.16	26.45	36.33	24.70	43.18	94.34	504.87	52.70	22.58	30.84	34.52	30.79	68.16
8	36.72	24.94	44.31	77.95	482.21	164.89	18.61	24.24	31.98	26.06	63.07	26.45	36.72	24.94	44.31	77.95	482.21	164.89	18.61	24.24	31.98	26.06	63.07
9	30.98	28.26	43.18	75.61	451.83	136.15	17.08	21.17	28.33	24.43	42.34	28.10	30.98	28.26	43.18	75.61	451.83	136.15	17.08	21.17	28.33	24.43	42.34
10	30.62	32.24	41.32	103.79	408.84	71.61	15.95	16.73	29.56	116.92	41.47	33.52	30.62	32.24	41.32	103.79	408.84	71.61	15.95	16.73	29.56	116.92	41.47
11	30.18	34.79	41.25	259.82	379.58	56.54	13.54	21.91	24.61	151.67	43.18	93.45	30.18	34.79	41.25	259.82	379.58	56.54	13.54	21.91	24.61	151.67	43.18
12	30.36	34.07	41.99	290.91	325.03	48.71	12.27	26.43	45.17	65.67	42.85	90.70	30.36	34.07	41.99	290.91	325.03	48.71	12.27	26.43	45.17	65.67	42.85
13	28.55	34.75	41.80	269.05	322.55	42.74	12.15	18.65	56.17	52.08	43.14	59.41	28.55	34.75	41.80	269.05	322.55	42.74	12.15	18.65	56.17	52.08	43.14
14	27.35	47.01	44.54	241.63	247.54	39.52	38.04	16.04	58.71	65.75	32.56	42.85	27.35	47.01	44.54	241.63	247.54	39.52	38.04	16.04	58.71	65.75	32.56
15	27.35	58.80	64.83	186.02	202.47	38.60	34.19	14.75	62.01	41.26	37.37	43.94	27.35	58.80	64.83	186.02	202.47	38.60	34.19	14.75	62.01	41.26	37.37
16	27.35	83.13	110.72	158.74	182.55	35.80	21.36	14.59	44.31	37.56	38.97	101.51	27.35	83.13	110.72	158.74	182.55	35.80	21.36	14.59	44.31	37.56	38.97
17	27.35	92.62	144.91	164.88	192.37	33.79	23.56	12.93	46.92	35.52	36.43	83.01	27.35	92.62	144.91	164.88	192.37	33.79	23.56	12.93	46.92	35.52	36.43
18	26.86	79.37	102.54	226.32	163.18	29.49	37.47	12.19	52.89	34.73	40.41	49.35	26.86	79.37	102.54	226.32	163.18	29.49	37.47	12.19	52.89	34.73	40.41
19	26.22	59.08	70.43	475.75	141.16	26.60	24.69	11.05	43.33	33.40	46.50	35.22	26.22	59.08	70.43	475.75	141.16	26.60	24.69	11.05	43.33	33.40	46.50
20	23.35	48.15	67.03	591.21	126.39	23.25	48.14	13.04	36.49	32.15	69.99	44.08	23.35	48.15	67.03	591.21	126.39	23.25	48.14	13.04	36.49	32.15	69.99
21	23.43	46.05	62.02	500.44	136.39	35.75	27.82	34.78	50.50	32.15	52.68	42.13	23.43	46.05	62.02	500.44	136.39	35.75	27.82	34.78	50.50	32.15	52.68
22	23.07	43.24	57.16	454.05	178.63	50.64	19.38	26.33	43.76	32.15	45.19	35.61	23.07	43.24	57.16	454.05	178.63	50.64	19.38	26.33	43.76	32.15	45.19
23	24.48	41.99	55.21	336.92	132.26	32.69	15.88	127.74	35.08	32.15	31.60	29.48	24.48	41.99	55.21	336.92	132.26	32.69	15.88	127.74	35.08	32.15	31.60
24	24.70	42.89	55.52	336.72	109.60	27.23	14.57	62.21	30.79	31.28	23.57	34.29	24.70	42.89	55.52	336.72	109.60	27.23	14.57	62.21	30.79	31.28	23.57
25	25.27	41.11	52.38	393.37	103.77	31.33	15.72	33.96	27.41	49.23	28.31	59.06	25.27	41.11	52.38	393.37	103.77	31.33	15.72	33.96	27.41	49.23	28.31
26	25.65	40.53	49.58	356.70	185.48	62.63	14.61	25.76	27.07	65.46	30.94	53.19	25.65	40.53	49.58	356.70	185.48	62.63	14.61	25.76	27.07	65.46	30.94
27	27.24	43.14	49.27	371.23	132.03	33.80	14.14	23.81	29.68	50.92	32.17	41.52	27.24	43.14	49.27	371.23	132.03	33.80	14.14	23.81	29.68	50.92	32.17
28	27.35	65.93	51.77	410.86	143.44	25.58	14.18	719.55	24.75	42.88	27.13	39.49	27.35	65.93	51.77	410.86	143.44	25.58	14.18	719.55	24.75	42.88	27.13
29	27.35	55.51	459.71	109.32	22.79	13.28	203.40	25.61	38.05	26.68	36.88		27.35	55.51	459.71	109.32	22.79	13.28	203.40	25.61	38.05	26.68	36.88
30	27.35	52.76	439.97	92.17	20.27	20.71	95.16	26.76	35.52	21.97	34.24		27.35	52.76	439.97	92.17	20.27	20.71	95.16	26.76	35.52	21.97	34.24
31	27.35	51.31		81.82		19.99	76.45		34.76		33.17		27.35	51.31		81.82		19.99	76.45		34.76		33.17
MEAN	28.61	42.80	57.86	261.86	285.88	51.68	25.12	78.22	38.76	42.16	39.90	43.88	MEAN	28.61	42.80	57.86	261.86	285.88	51.68	25.12	78.22	38.76	42.16
INCHES	0.68	1.038	1.554	6.407	7.479	1.343	0.675	1.007	1.133	1.037	1.179		INCHES	0.68	1.038	1.554	6.407	7.479	1.343	0.675	1.007	1.133	1.037
STA AV	1.280	1.178	2.275	6.111	3.338	1.116	0.602	0.621	0.479	0.954	1.389	1.333	STA AV	1.280	1.178	2.275	6.111	3.338	1.116	0.602	0.621	0.479	0.954

NOTES: To convert mean daily discharge in CFS to M/DAY, multiply by 0.0000665. STA AV based on 12 yr (1960-1971) record period.

1971      SELECTED RUNOFF EVENT												NORTH DANVILLE, VERMONT WATERSHED W-5																	
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF																	
Date	Rainfall	Runoff	Date	Rainfall	Runoff	Date	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.													
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	No-Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	No-Day	of Day	(cfs)	(inches)													
EVENT OF AUGUST 23 - 24, 1971																													
RG 000010						RG 000010																							
8-23	0.0	0.002	8-23	100	0.0	0.0	0.0	0.0	8-23	217	24.696	0.0																	
				232	0.0	0.0	0.0	0.0		307	25.564	0.0008																	
				359	0.0345	0.05				445	28.276	0.0024																	
				458	0.2339	0.28				600	33.166	0.0038																	
				557	0.2136	0.49				727	56.208	0.0061																	
WATERSHED CONDITIONS:																													
67% forest; 17% hay; 13%						622						0.4080						0.66											
pastured land; 2% idle land						640						0.7667						0.89											
with dense brush and grass						747						0.0537						0.95											
growth; 1% homesites and						0.0						0.0						0.95											
roads.						1003						0.0476						1.00											
						1729						0.0						1.00											
						2212						0.0085						1.04											
												1758						147.461						0.0821					
												2400						56.312						0.1087					
												602						72.990						0.1271					
												1200						59.065						0.1413					
												1759						48.142						0.1529					
												2400						40.814						0.1626					



## REYNOLDS, IDAHO WATERSHED W-1 (036068)

LOCATION: Owyhee County, Idaho; 34 miles south of Hampa; north flowing tributary to the Snake River.

AREA: 57700.00 acres 90.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO WATERSHED W-1 (036068)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	3.24	1.24	3.53	1.27	1.17	2.74	0.53	0.63	2.24	1.61	2.70	23.66													
	Q	0.950	0.384	0.869	0.919	0.915	0.299	0.074	0.025	0.021	0.068	0.117	0.193	4.832												
STA AV	P	3.99	1.30	1.73	1.36	1.04	1.92	0.33	1.15	0.93	1.45	2.35	2.29	19.85												
	Q	0.522	0.289	0.311	0.539	0.587	0.291	0.039	0.024	0.014	0.023	0.049	0.230	2.917												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																										
Maximum Discharge													Maximum Volume for Selected Time Interval													
Date Rate Date Vol.													Date Vol.													
1 Hour													2 Hours													
Date Vol.													Date Vol.													
2 Hours													6 Hours													
Date Vol.													Date Vol.													
6 Hours													12 Hours													
Date Vol.													Date Vol.													
12 Hours													1 Day													
Date Vol.													Date Vol.													
1 Day													2 Days													
Date Vol.													Date Vol.													
2 Days													8 Days													
Date Vol.													Date Vol.													
1971	1-18	0.009	1-18	0.009	1-18	0.018	1-18	0.053	1-17	0.099	1-17	0.184	1-17	0.306	1-16	0.631										
MAXIMUMS FOR PERIOD OF RECORD																										
12-23	0.065	12-23	0.064	12-23	0.125	12-23	0.270	12-23	0.327	12-23	0.453	12-23	0.721	12-28	1.313											
1964		1964		1964		1964		1964		1964		1964		1965												

NOTES: Watershed: Predominately sagebrush rangeland, 95%; small stands of forest, 2%; permanent fields of flood irrigated alfalfa, 3%. For revised map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 68.1-6. Records began 1963. Precipitation data are Thissen weighted average 'Computed Actual' amounts from 45 rain gages. Station average precipitation amounts are based on 1968-71 data. Station average runoff amounts are based on the 1963-71 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles W.E. of watershed.

1971 DAILY AIR TEMPERATURE (degrees F)													REYNOLDS, IDAHO WATERSHED W-1 (036068)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min													
1	28 19	51 30	29 16	51 20	76 39	53 43	84 46	98 62	82 40	64 38	43 31	36 20													
2	25 16	40 30	36 15	54 30	76 44	58 41	74 54	94 73	63 50	58 36	41 28	30 26													
3	21 10	40 24	49 31	53 28	74 49	63 37	72 42	98 72	66 47	56 39	50 23	34 27													
4	22 0	41 25	37 22	59 24	67 46	63 42	84 42	95 64	74 39	70 39	55 28	32 27													
5	20 3	36 16	33 13	63 26	64 48	70 43	76 50	96 71	89 46	73 45	37 20	46 31													
6	20 8	42 18	40 11	65 36	63 44	76 42	73 50	92 64	73 57	76 44	41 14	42 25													
7	20 14	44 22	48 22	51 31	68 41	81 47	76 42	92 66	89 43	74 51	43 20	22 14													
8	43 16	44 20	47 24	57 24	66 43	70 47	86 50	95 62	79 36	75 45	46 21	23 13													
9	44 40	43 19	52 20	65 40	68 47	73 45	88 64	96 62	79 52	76 44	51 32	39 23													
10	44 35	61 34	51 30	54 29	70 40	63 49	70 46	95 64	91 46	77 44	55 34	33 28													
11	42 32	54 30	49 33	47 28	72 42	71 42	71 45	93 63	78 53	72 46	52 39	28 24													
12	34 16	54 28	47 33	50 29	76 47	79 41	80 46	96 57	81 41	66 44	43 39	30 25													
13	29 18	53 30	38 28	62 37	64 40	80 52	84 48	100 60	78 47	75 40	42 37	31 25													
14	38 21	54 27	43 25	68 38	68 36	69 44	88 52	90 65	68 46	48 36	38 31	36 28													
15	44 36	51 28	40 25	55 43	76 39	76 50	94 56	91 58	68 40	44 26	39 29	30 26													
16	51 37	43 21	34 20	59 31	47 35	73 45	97 62	87 60	62 40	41 34	41 23	35 27													
17	51 36	39 31	33 18	46 37	53 32	74 43	93 65	84 54	58 36	47 32	40 27	39 20													
18	44 35	45 31	39 13	49 33	61 32	71 50	86 67	87 51	61 29	50 34	37 28	32 14													
19	60 32	31 25	45 15	60 32	65 33	75 47	87 63	93 52	73 32	53 45	46 32	34 10													
20	52 25	41 24	53 13	58 35	47 30	87 48	88 61	90 65	65 43	53 40	45 27	41 22													
21	38 24	43 21	54 36	58 35	56 40	91 50	90 58	88 58	63 37	50 29	42 32	46 34													
22	34 22	39 26	54 38	58 39	67 44	94 48	88 64	86 54	70 33	58 40	45 26	47 36													
23	40 34	42 26	50 41	49 37	69 40	87 56	91 56	75 39	77 34	53 38	44 23	40 33													
24	42 35	50 32	50 37	40 36	77 40	87 49	91 59	84 40	77 48	48 35	49 34	40 29													
25	46 40	32 24	47 33	55 32	71 46	77 56	89 59	88 50	58 40	54 29	40 32	42 25													
26	57 36	33 20	55 33	55 35	77 51	58 51	88 59	91 50	52 34	53 40	44 32	31 16													
27	50 38	33 21	45 30	58 33	79 53	60 45	91 60	90 40	51 32	36 28	40 33	28 8													
28	48 27	26 17	49 25	64 39	68 47	62 41	91 58	89 55	56 28	29 20	43 34	26 9													
29	53 24	40 32	60 32	64 33	74 40	67 38	94 61	90 57	47 32	36 18	39 34	30 10													
30	58 44	58 33	58 33	70 38	58 44	76 42	94 67	63 52	41 36	40 30	39 28	31 15													
31	58 42	44 27		60 40			95 64	75 52		35 29		35 15													
AV.	41 26	43 25	44 26	56 33	67 42	73 46	86 55	90 58	68 41	56 37	44 29	34 22													
RAIN	33.4	34.1	35.7	44.8	54.4	59.3	70.5	74.5	54.5	46.5	36.4	28.3													
STA AV	37 21	45 26	47 26	55 29	67 39	74 47	86 52	85 51	74 43	61 33	48 27	38 21													

NOTES: Temperature data taken from hygrothermograph record at station 076159. STA AV is average for 9 yr (1963-71) record period.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO WATERSHED W-1 (036068)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.00	0.0	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.11	0.16	0.01											
2	0.00	0.00	0.00	0.0	0.00	0.08	0.00	0.01	0.00	0.0	0.00	0.03											
3	0.00	0.00	0.05	0.00	0.23	0.03	0.00	0.01	0.01	0.0	0.00	0.08											
4	0.0	0.12	0.07	0.00	0.01	0.15	0.00	0.00	0.00	0.0	0.02	0.09											
5	0.01	0.03	0.00	0.00	0.00	0.01	0.00	0.07	0.00	0.0	0.00	0.46											
6	0.01	0.00	0.01	0.01	0.46	0.00	0.00	0.15	0.23	0.0	0.00	0.25											
7	0.01	0.0	0.01	0.16	0.00	0.01	0.00	0.01	0.00	0.0	0.01	0.01											
8	0.48	0.00	0.00	0.0	0.06	0.00	0.00	0.0	0.0	0.0	0.00	0.18											
9	0.04	0.01	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.0	0.00	0.13											
10	0.03	0.13	0.08	0.23	0.0	0.10	0.00	0.0	0.0	0.0	0.00	0.07											
11	0.15	0.00	0.09	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.01	0.01											
12	0.07	0.0	1.05	0.00	0.02	0.00	0.0	0.00	0.0	0.00	0.29	0.21											
13	0.07	0.0	0.01	0.00	0.01	0.00	0.0	0.0	0.0	0.08	0.14	0.14											
14	0.09	0.00	0.03	0.03	0.00	0.00	0.00	0.0	0.0	0.03	0.01	0.12											
15	0.21	0.15	0.06	0.02	0.09	0.0	0.00	0.0	0.0	0.00	0.00	0.05											
16	0.18	0.01	0.59	0.12	0.10	0.00	0.00	0.0	0.00	0.51	0.0	0.00											
17	1.03	0.15	0.01	0.01	0.00	0.0	0.00	0.0	0.0	0.19	0.00	0.00											
18	0.36	0.25	0.0	0.08	0.00	0.00	0.00	0.0	0.0	0.01	0.08	0.00											
19	0.02	0.10	0.00	0.00	0.00	0.00	0.32	0.0	0.00	0.15	0.00	0.00											
20	0.06	0.00	0.00	0.21	0.00	0.00	0.01	0.00	0.01	0.06	0.00	0.00											
21	0.01	0.00	0.01	0.04	0.01	0.00	0.02	0.0	0.0	0.00	0.00	0.00											
22	0.09	0.00	0.27	0.01	0.00	0.0	0.14	0.00	0.0	0.00	0.00	0.31											
23	0.08	0.00	0.52	0.21	0.00	0.00	0.02	0.00	0.0	0.00	0.00	0.06											
24	0.01	0.12	0.04	0.07	0.00	0.0	0.00	0.0	0.0	0.00	0.11	0.00											
25	0.17	0.02	0.27	0.06	0.01	0.52	0.00	0.0	0.02	0.00	0.06	0.42											
26	0.01	0.00	0.22	0.01	0.03	0.86	0.00	0.0	0.10	0.14	1.25	0.03											
27	0.00	0.06	0.02	0.00	0.00	0.22	0.00	0.00	0.03	0.08	0.06	0.00											
28	0.0	0.08	0.0	0.0	0.01	0.20	0.00	0.0	0.05	0.00	0.18	0.00											
29	0.00	0.00	0.00	0.04	0.00	0.00	0.0	0.37	0.57	0.00	0.27	0.07											
30	0.08	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.21	0.05	0.01	0.01											
31	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00											
TOTAL	3.28	1.24	3.53	1.27	1.17	2.74	0.53	0.63	2.24	1.63	2.70	2.76											
STA AV	3.99	1.30	1.73	1.36	1.04	1.92	0.33	1.15	0.93	1.45	2.35	2.29											

NOTES: Values are Thiessen weighted average 'Actual' amounts from 45 recording pairs of gauges (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Oslo, Norway, August, 1972. The equation used is:  $\text{log} (O/S) = \text{log} (O/S) \times 1.80$ , where  $O$  = unshielded catchment,  $S$  = shielded catchment, and  $A$  = actual amount of precipitation. STA AV values are based on a yr (1968-71) record period.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO WATERSHED W-1 (036068)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.00	0.0	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.06	0.09	0.00													
2	0.00	0.00	0.00	0.0	0.00	0.39	0.00	0.01	0.00	0.0	0.00	0.02													
3	0.00	0.00	0.03	0.00	0.19	0.03	0.00	0.01	0.01	0.0	0.00	0.05													
4	0.0	0.07	0.03	0.00	0.00	0.14	0.00	0.00	0.00	0.0	0.02	0.05													
5	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.0	0.00	0.29												
6	0.01	0.00	0.00	0.00	0.39	0.00	0.00	0.14	0.19	0.0	0.0	0.00	0.16												
7	0.03	0.00	0.00	0.09	0.00	0.01	0.00	0.01	0.00	0.0	0.0	0.00	0.00												
8	0.35	0.00	0.00	0.0	0.05	0.00	0.00	0.00	0.0	0.0	0.0	0.08													
9	0.03	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.0	0.0	0.00	0.06													
10	0.02	0.09	0.05	0.12	0.0	0.09	0.00	0.0	0.0	0.0	0.00	0.03													
11	0.10	0.00	0.07	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.00													
12	0.05	0.0	0.77	0.00	0.00	0.01	0.00	0.0	0.00	0.0	0.21	0.07													
13	0.05	0.0	0.00	0.00	0.00	0.01	0.00	0.00	0.0	0.05	0.09	0.05													
14	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.0	0.0	0.02	0.00	0.05													
15	0.14	0.09	0.04	0.01	0.05	0.0	0.00	0.0	0.0	0.00	0.00	0.02													
16	0.12	0.00	0.31	0.07	0.07	0.00	0.00	0.0	0.00	0.39	0.0	0.00													
17	0.81	0.07	0.01	0.01	0.00	0.0	0.00	0.0	0.0	0.14	0.00	0.00													
18	0.27	0.11	0.0	0.04	0.00	0.00	0.00	0.0	0.0	0.00	0.06	0.00													
19	0.02	0.04	0.00	0.00	0.00	0.0	0.0	0.11	0.00	0.0	0.00	0.00													
20	0.04	0.00	0.00	0.14	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00													
21	0.01	0.00	0.01	0.02	0.01	0.00	0.02	0.0	0.0	0.00	0.00	0.00													
22	0.06	0.0	0.21	0.00	0.00	0.0	0.13	0.00	0.0	0.00	0.00	0.23													
23	0.05	0.00	0.41	0.12	0.00	0.00	0.02	0.00	0.0	0.00	0.00	0.04													
24	0.01	0.06	0.03	0.04	0.00	0.0	0.00	0.0	0.00	0.00	0.08	0.00													
25	0.12	0.01	0.22	0.04	0.00	0.01	0.48	0.00	0.01	0.00	0.05	0.29													
26	0.01	0.00	0.16	0.01	0.02	0.80	0.00	0.0	0.08	0.09	0.98	0.02													
27	0.03	0.00	0.01	0.00	0.00	0.20	0.00	0.00	0.02	0.04	0.05	0.00													
28	0.0	0.04	0.0	0.0	0.00	0.19	0.00	0.00	0.03	0.00	0.11	0.00													
29	0.00	0.00	0.00	0.00	0.03	0.00	0.0	0.34	0.38	0.00	0.18	0.04													
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.11	0.03	0.01													
31	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00													
TOTAL	2.40	0.62	2.46	0.74	0.94	2.52	0.48	0.58	1.54	1.08	1.97	1.60													
STA AV																									

NOTES: Values are Thiessen weighted average amounts from 45 unshielded recording gauges. STA AV do not apply to unshielded rain gauge records.

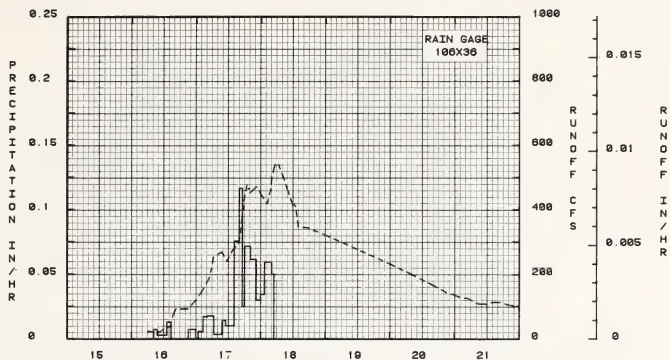
1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO WATERSHED W-1 (036068)														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.00	0.0	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.08	0.13	0.01	1	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.01	0.00	0.00	0.00	0.02		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.0	0.00	0.00	2	0.00	0.00	0.04	0.00	0.21	0.03	0.00	0.01	0.01	0.0	0.00	0.07		
3	0.09	0.05	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.0	0.00	0.00	3	0.09	0.05	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.0	0.00	0.07		
4	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.0	0.00	0.37	4	0.01	0.01	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.0	0.00	0.37		
5	0.01	0.00	0.00	0.00	0.01	0.43	0.00	0.00	0.15	0.21	0.0	0.00	5	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.21	0.0	0.00	0.21		
6	0.04	0.00	0.00	0.00	0.12	0.00	0.01	0.00	0.01	0.00	0.0	0.00	6	0.04	0.00	0.00	0.00	0.12	0.00	0.00	0.01	0.00	0.0	0.0	0.00		
7	0.42	0.00	0.00	0.00	0.0	0.06	0.00	0.00	0.00	0.0	0.0	0.13	7	0.42	0.00	0.00	0.00	0.0	0.06	0.00	0.00	0.0	0.0	0.0	0.13		
8	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.0	0.00	0.05	8	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.0	0.0	0.0	0.05		
9	0.03	0.11	0.07	0.17	0.0	0.09	0.00	0.0	0.0	0.0	0.00	0.05	9	0.03	0.11	0.07	0.17	0.0	0.09	0.00	0.0	0.0	0.0	0.00	0.05		
10	0.12	0.00	0.08	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.01	0.01	10	0.12	0.00	0.08	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.01	0.01		
11	0.06	0.0	0.91	0.00	0.01	0.00	0.0	0.00	0.0	0.00	0.25	0.14	11	0.06	0.0	0.91	0.00	0.01	0.00	0.0	0.00	0.0	0.00	0.25	0.14		
12	0.06	0.0	0.00	0.00	0.00	0.01	0.00	0.00	0.0	0.06	0.12	0.09	12	0.06	0.0	0.00	0.00	0.00	0.01	0.00	0.0	0.06	0.12	0.09			
13	0.08	0.03	0.03	6.03	0.00	0.00	0.00	0.0	0.02	0.0	0.00	0.09	13	0.08	0.03	0.03	6.03	0.00	0.00	0.00	0.0	0.02	0.0	0.00	0.09		
14	0.17	0.11	0.05	0.01	0.06	0.0	0.00	0.0	0.00	0.0	0.00	0.04	14	0.17	0.11	0.05	0.01	0.06	0.0	0.00	0.0	0.00	0.0	0.00	0.04		
15	0.15	0.00	0.44	0.10	0.08	0.00	0.00	0.0	0.00	0.46	0.0	0.00	15	0.15	0.00	0.44	0.10	0.08	0.00	0.00	0.0	0.00	0.46	0.0	0.00		
16	0.92	0.11	0.01	0.01	0.00	0.0	0.00	0.0	0.00	0.0	0.17	0.00	16	0.92	0.11	0.01	0.01	0.00	0.0	0.00	0.0	0.0	0.17	0.00	0.00		
17	0.32	0.17	0.0	0.06	0.00	0.00	0.00	0.0	0.0	0.00	0.07	0.00	17	0.32	0.17	0.0	0.06	0.00	0.00	0.00	0.0	0.0	0.00	0.07	0.00		
18	0.02	0.07	0.00	0.00	0.00	0.00	0.31	0.0	0.00	0.13	0.00	0.00	18	0.02	0.07	0.00	0.00	0.00	0.00	0.31	0.0	0.00	0.13	0.00	0.00		
19	0.05	0.00	0.00	0.17	0.00	0.00	0.01	0.00	0.01	0.05	0.00	0.00	19	0.05	0.00	0.00	0.17	0.00	0.00	0.01	0.00	0.01	0.05	0.00	0.00		
20	0.01	0.00	0.01	0.03	0.01	0.00	0.02	0.0	0.0	0.00	0.00	0.00	20	0.01	0.00	0.01	0.03	0.01	0.00	0.02	0.0	0.0	0.00	0.00	0.00		
21	0.07	0.00	0.25	0.01	0.00	0.00	0.13	0.00	0.0	0.00	0.00	0.27	21	0.07	0.00	0.25	0.01	0.00	0.00	0.13	0.00	0.0	0.00	0.00	0.27		
22	0.07	0.00	0.46	0.16	0.00	0.00	0.02	0.00	0.0	0.00	0.00	0.05	22	0.07	0.00	0.46	0.16	0.00	0.00	0.02	0.00	0.0	0.00	0.00	0.05		
23	0.01	0.09	0.04	0.05	0.00	0.0	0.00	0.0	0.00	0.00	0.10	0.00	23	0.01	0.09	0.04	0.05	0.00	0.0	0.00	0.0	0.00	0.10	0.00	0.00		
24	0.15	0.02	0.25	0.05	0.01	0.51	0.00	0.0	0.01	0.00	0.06	0.36	24	0.15	0.02	0.25	0.05	0.01	0.51	0.00	0.0	0.01	0.00	0.06	0.36		
25	0.01	0.00	0.19	0.01	0.03	0.83	0.00	0.0	0.09	0.12	1.12	0.02	25	0.01	0.00	0.19	0.01	0.03	0.83	0.00	0.0	0.09	0.12	1.12	0.02		
26	0.00	0.01	0.00	0.00	0.00	0.21	0.00	0.00	0.03	0.06	0.06	0.00	26	0.00	0.01	0.00	0.00	0.00	0.21	0.00	0.00	0.03	0.06	0.06	0.00		
27	0.0	0.06	0.0	0.0	0.00	0.20	0.00	0.0	0.08	0.0	0.14	0.00	27	0.0	0.06	0.0	0.0	0.00	0.20	0.00	0.0	0.08	0.0	0.14	0.00		
28	0.00	0.00	0.00	0.00	0.03	0.00	0.0	0.36	0.48	0.00	0.23	0.05	28	0.00	0.00	0.00	0.00	0.03	0.00	0.0	0.36	0.48	0.00	0.23	0.05		
29	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.04	0.01	29	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.04	0.01		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00		
TOTAL													2.82	TOTAL													2.16
STA AV													2.82	STA AV													2.16

NOTES: Values are Thiessen weighted average amounts from 45 shielded recording gages. STA AV do not apply to shielded rain gage records.

1971													REYNOLDS, IDAHO WATERSHED W-1 (036068)												
MEAN DAILY DISCHARGE (cfs)																									
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.30	61.33	19.67	84.51	85.31	32.11	19.55	1.86	1.71	5.31	2.94	11.27	1	8.30	61.33	19.67	84.51	85.31	32.11	19.55	1.86	1.71	5.31	2.94	11.27
2	7.51	57.60	18.77	81.08	104.38	41.71	19.11	2.01	1.65	4.91	2.72	12.54	2	7.51	57.60	18.77	81.08	104.38	41.71	19.11	2.01	1.65	4.91	2.72	12.54
3	6.91	41.39	22.89	75.90	115.58	34.75	14.39	2.06	1.63	5.24	2.69	11.88	3	6.91	41.39	22.89	75.90	115.58	34.75	14.39	2.06	1.63	5.24	2.69	11.88
4	6.48	40.89	21.36	74.16	122.91	34.30	10.48	2.13	1.57	6.26	2.77	11.75	4	6.48	40.89	21.36	74.16	122.91	34.30	10.48	2.13	1.57	6.26	2.77	11.75
5	6.27	35.01	17.18	77.01	122.97	33.26	10.32	2.00	1.46	7.01	2.69	29.13	5	6.27	35.01	17.18	77.01	122.97	33.26	10.32	2.00	1.46	7.01	2.69	29.13
6	6.23	27.65	16.94	82.29	131.12	29.32	9.43	2.01	1.55	7.25	3.19	77.58	6	6.23	27.65	16.94	82.29	131.12	29.32	9.43	2.01	1.55	7.25	3.19	77.58
7	6.33	30.87	17.23	95.16	133.11	27.95	6.59	1.81	1.54	6.78	6.34	18.00	7	6.33	30.87	17.23	95.16	133.11	27.95	6.59	1.81	1.54	6.78	6.34	18.00
8	17.96	28.68	17.62	81.31	127.95	26.76	5.15	1.67	1.41	6.85	7.00	14.70	8	17.96	28.68	17.62	81.31	127.95	26.76	5.15	1.67	1.41	6.85	7.00	14.70
9	80.92	26.70	16.61	81.47	119.25	24.15	5.33	1.57	1.43	5.28	6.27	16.21	9	80.92	26.70	16.61	81.47	119.25	24.15	5.33	1.57	1.43	5.28	6.27	16.21
10	34.88	47.03	18.60	87.88	111.70	24.52	5.05	1.56	1.43	4.92	6.13	15.75	10	34.88	47.03	18.60	87.88	111.70	24.52	5.05	1.56	1.43	4.92	6.13	15.75
11	20.38	85.46	26.24	75.18	107.02	25.71	4.63	1.44	1.38	4.73	6.48	15.41	11	20.38	85.46	26.24	75.18	107.02	25.71	4.63	1.44	1.38	4.73	6.48	15.41
12	13.27	36.45	72.75	67.04	104.20	22.85	4.59	1.75	1.47	4.61	8.11	15.19	12	13.27	36.45	72.75	67.04	104.20	22.85	4.59	1.75	1.47	4.61	8.11	15.19
13	9.77	36.86	73.50	64.40	97.44	19.29	4.59	1.82	1.43	4.46	8.37	14.96	13	9.77	36.86	73.50	64.40	97.44	19.29	4.59	1.82	1.43	4.46	8.37	14.96
14	18.66	35.91	39.93	68.75	83.50	16.31	4.49	1.78	1.36	4.70	7.93	14.85	14	18.66	35.91	39.93	68.75	83.50	16.31	4.49	1.78	1.36	4.70	7.93	14.85
15	25.27	38.87	35.01	78.33	74.43	17.11	4.78	1.59	1.43	4.89	7.51	14.63	15	25.27	38.87	35.01	78.33	74.43	17.11	4.78	1.59	1.43	4.89	7.51	14.63
16	52.82	33.47	30.42	76.81	74.20	16.94	4.27	1.37	1.41	5.38	6.42	14.20	16	52.82	33.47	30.42	76.81	74.20	16.94	4.27	1.37	1.41	5.38	6.42	14.20
17	297.26	34.18	30.23	79.42	58.97	22.45	4.11	1.57	1.49	7.12	6.60	13.77	17	297.26	34.18	30.23	79.42	58.97	22.45	4.11	1.57	1.49	7.12	6.60	13.77
18	411.01	30.85	31.51	71.84	46.10	22.27	4.38	1.81	1.58	6.45	7.28	13.35	18	411.01	30.85	31.51	71.84	46.10	22.27	4.38	1.81	1.58	6.45	7.28	13.35
19	276.08	29.45	30.48	68.65	39.60	22.15	4.48	1.76	1.59	6.78	7.06	12.94	19	276.08	29.45	30.48	68.65	39.60	22.15	4.48	1.76	1.59	6.78	7.06	12.94
20	182.16	27.20	32.59	74.09	31.70	19.39	4.73	1.87	1.59	7.35	7.23	12.54	20	182.16	27.20	32.59	74.09	31.70	19.39	4.73	1.87	1.59	7.35	7.23	12.54
21	113.98	27.90	50.82	73.85	25.66	17.21	3.31	2.22	1.76	7.08	7.30	12.14	21	113.98	27.90	50.82	73.85	25.66	17.21	3.31	2.22	1.76	7.08	7.30	12.14
22	93.63	27.42	97.78	66.63	19.99	15.23	2.52	1.90	1.79	6.51	7.28	11.94	22	93.63	27.42	97.78	66.63	19.99	15.23	2.52	1.90	1.79	6.51	7.28	11.94
23	80.45	24.93	240.49	71.56	21.83	13.39	2.34	1.69	1.60	6.46	7.02	11.65	23	80.45	24.93	240.49	71.56	21.83	13.39	2.34	1.69	1.60	6.46	7.02	11.65
24	70.88	27.14	178.08	69.82	21.67	12.30	2.22	1.93	1.31	6.21	7.55	10.99	24	70.88	27.14	178.08	69.82	21.67	12.30	2.22	1.93	1.31	6.21	7.55	10.99
25	73.03	25.58	126.12	67.65	24.95	14.15	2.05	1.98	1.65	5.76	7.82	10.34	25	73.03	25.58	126.12	67.65	24.95	14.15	2.05	1.98	1.65	5.76	7.82	10.34
26	77.32	18.81	241.11	65.05	32.78	30.20	2.60	2.15	1.50	5.15	26.01	9.72	26	77.32	18.81	241.11	65.05	32.78	30.20	2.60	2.15	1.50	5.15	26.01	9.72
27	16.70	17.17	10.19	62.99	29.49	10.33	2.53	2.45	1.93	5.53	9.10	10.10	27	16.70	17.17	10.19	62.99	29.49	10.33	2.53	2.45	1.93	5.53	9.10	10.10
28	62.70	19.37	112.34	63.34	38.00	32.55	2.98	2.14	1.62	1.96	22.06	8.62	28	62.70	19.37	112.34	63.34	38.00	32.55	2.98	2.14	1.62	1.96	22.06	8.62
29	56.48	11.35	116.35	68.60	35.23	24.35	3.18	4.09	2.68	2.33	29.98	8.13	29	56.48	11.35	116.35	68.60	35.23	24.35	3.18	4.09	2.68	2.33	29.98	8.13
30	55.69	10.49	116.35	76.74	39.68	20.79	3.08	3.68	2.62	2.26	16.13	7.66	30	55.69	10.49	116.35	76.74	39.68	20.79	3.08	3.68	2.62	2.26	16.13	7.66
31	63.17		96.43		32.51		1.76	2.31		2.76			31	63.17		96.43		32.51		1.76	2.31		2.76		
MEAN	74.378	33.277	68.028	74.330	71.620	24.185	5.776	1.949	1.715	5.328	6.476	15.102	MEAN	74.378	33.277	68.028	74.330	71.620	24.185	5.776	1.949	1.715	5.328	6.476	15.102
INCHES	0.950	3.848	0.869	0.919	0.815	0.374	0.259	0.069	0.021	0.069	0.117	0.101	INCHES	0.950	3.848	0.869	0.919	0.815	0.374	0.259	0.069	0.021	0.069	0.117	0.101
STA A	0.522	0.289	0.311	0.539	0.587	0.291	0.039	0.024	0.014	0.023	0.049	0.230	STA A	0.522	0.289	0.311	0.539	0.587	0.291	0.039	0.024	0.014	0.023	0.049	0.230

1971 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO WATERSHED W-1 (036068)					
ANTHROPOGENIC CONDITIONS			RAINFALL			RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day
								Rate (cfs)
								Acc. (inches)
EVENT OF JANUARY 15 - 21, 1971								
RG 106I36			RG 106I36					
1-16	0.02	0.003	1-16	813	0.0	0.0	1-16	600
				936	0.0072	0.01		1030
				1313	0.0028	0.02		1200
				1445	0.0130	0.04		1430
				2112	0.0	0.04		1530
WATERSHED CONDITIONS:				2400	0.0071	0.06		1630
Runoff event was caused by a				48	0.0	0.06		2100
sustained winter rain fol-			1-17	234	0.0057	0.07		2400
lowing about 10 days of in-				418	0.0173	0.10	1-17	300
termittent rain and snow-				634	0.0176	0.14		500
melt.				940	0.0032	0.15		630
				1105	0.0141	0.17		930
				1407	0.0099	0.20		1130
				1558	0.0757	0.34		1330
				1710	0.1167	0.48		1600
				1758	0.0250	0.50		1700
				2012	0.0716	0.66		1800
				2219	0.0614	0.79		1845
				2400	0.0297	0.84		1915
			1-18	127	0.0345	0.89		1950
				409	0.0593	1.05		1955
				457	0.0500	1.09		2225
							1-18	2400
								340
								400
								515
								630
								800
								845
								930
								1030
								1155
								1215
								1300
								1400
								1800
								2400
			1-19	2400				2400
			1-20	800				800
				1600				1600
				2100				2100
				2400				2400
			1-21	200				200
				500				500
				900				900
				1200				1200

NOTES: To convert CFS to IS/HR, multiply by 0.00001719.



EVENT OF JANUARY 15 - 21, 1971  
REYNOLDS, IDAHO WATERSHED W-1 (036068)

## REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

LOCATION: Owyhee County, Idaho; 34 miles south of Hampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 8990.00 acres 14.05 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971	P	3.23	1.30	3.69	1.61	1.18	3.09	0.26	0.55	2.94	1.44	3.53	2.69	25.51										
	Q	1.072	0.289	0.878	0.544	0.233	0.097	0.038	0.004	0.019	0.099	0.193	0.404	3.872										
STA AV	P	4.22	1.50	2.02	1.83	1.37	2.26	0.24	1.05	1.24	1.73	2.66	2.29	22.42										
	Q	0.816	0.358	0.399	0.431	0.301	0.134	0.027	0.041	0.022	0.045	0.088	0.161	2.820										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																								
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Maximum Volume for Selected Time Interval						
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.							
1971		1-18	0.015	1-18	0.014	1-18	0.027	1-18	0.074	1-17	0.141	1-17	0.259	1-17	0.412	1-16	0.771							
MAXIMUMS FOR PERIOD OF RECORD																								
		8-23	0.073	8-23	0.044	8-23	0.056	1-20	0.115	1-28	0.208	1-28	0.379	1-28	0.766	1-28	1.495							
		1965		1965		1965		1969		1965		1965		1965		1965								

NOTES: Watershed conditions: Predominately sagebrush rangeland, 95% irrigated pasture and hay crops, 1% for rap of Watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 68, 2-7. Records began 1963. Precipitation: Thiemsen weighted average 'Computed Actual' amounts from 9 rain gages. Station average precipitation amounts are based on 1968-71 data. Station average runoff amounts are based on record period (1963-71). For long-time precipitation records, see National Weather Service records at Boise, Idaho; 59 miles S.W. of watershed.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0	0.0	0.0	0.00	0.00	0.14	0.00	0.0	0.0	0.06	0.25	0.01													
2	0	0.0	0.00	0.01	0.0	0.0	0.62	0.0	0.00	0.0	0.0	0.0	0.04												
3	0	0.0	0.00	0.03	0.0	0.19	0.03	0.00	0.00	0.01	0.0	0.00	0.11												
4	0	0.0	0.06	0.05	0.0	0.00	0.14	0.0	0.0	0.0	0.0	0.08	0.10												
5	0	0.0	0.13	0.0	0.0	0.0	0.02	0.00	0.07	0.00	0.0	0.01	0.52												
6	0	0.01	0.0	0.0	0.00	0.00	0.64	0.00	0.0	0.12	0.29	0.0	0.0	0.13											
7	0	0.09	0.0	0.0	0.17	0.01	0.01	0.00	0.00	0.0	0.0	0.0	0.0												
8	0	0.53	0.0	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.19												
9	0	0.05	0.02	0.03	0.01	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.09												
10	0	0.04	0.10	0.03	0.16	0.0	0.08	0.00	0.0	0.0	0.0	0.0	0.08												
11	0	0.16	0.0	0.06	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.02												
12	0	0.14	0.0	1.39	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.31	0.21												
13	0	0.04	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.05	0.20	0.13												
14	0	0.08	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.12												
15	0	0.07	0.24	0.04	0.06	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.04												
16	0	0.19	0.0	0.44	0.30	0.05	0.0	0.0	0.0	0.0	0.39	0.0	0.0												
17	0	1.04	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0												
18	0	0.27	0.18	0.0	0.18	0.0	0.0	0.00	0.0	0.0	0.00	0.07	0.00												
19	0	0.02	0.16	0.02	0.0	0.01	0.0	0.08	0.0	0.0	0.24	0.01	0.0												
20	0	0.14	0.0	0.0	0.19	0.00	0.0	0.0	0.00	0.01	0.0	0.0	0.0												
21	0	0.0	0.0	0.0	0.03	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.0												
22	0	0.03	0.0	0.26	0.01	0.00	0.0	0.09	0.0	0.0	0.0	0.0	0.27												
23	0	0.05	0.0	0.54	0.31	0.0	0.03	0.00	0.0	0.0	0.12	0.0													
24	0	0.01	0.08	0.09	0.06	0.00	0.0	0.0	0.0	0.0	0.09	0.01													
25	0	0.27	0.01	0.29	0.00	0.01	0.63	0.0	0.0	0.0	0.0	0.06	0.38												
26	0	0.00	0.0	0.20	0.01	0.03	0.90	0.0	0.0	0.22	0.14	1.00	0.03												
27	0	0.00	0.05	0.03	0.0	0.01	0.31	0.0	0.0	0.00	0.12	0.10	0.0												
28	0	0.0	0.13	0.0	0.0	0.00	0.21	0.0	0.0	0.07	0.0	0.15	0.00												
29	0	0.00	0.0	0.00	0.01	0.00	0.0	0.55	0.35	0.0	0.0	0.0	0.07												
30	0	0.0	0.13	0.00	0.00	0.00	0.0	0.0	0.00	1.79	0.26	0.08	0.01												
31	0	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0		0.02														
TOTAL		3.23	1.30	3.69	1.61	1.18	3.09	0.26	0.55	2.94	1.44	3.53	2.69												
STA AV		4.22	1.50	2.02	1.83	1.37	2.26	0.24	1.05	1.24	1.73	2.66	2.29												

NOTES: Values are Thiessen weighted average 'Actual' amounts from 9 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Saxon, "Computing Actual Precipitation", Proceedings WMO-IMHS Symposium, Guello, Norway, August, 1972. The equation used is:  $\log_e (0/S) = \log_e (0/25) \times 1.80$ , where 0 = unshielded catchment, S = shielded catchment, and 1 = actual amount of precipitation. STA AV values are based on a 7 yr (1968-74) record period. For temperature information, see table of daily maximum and minimum values included for Watershed 68.001.

1971	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.00	0.0	0.0	0.11	0.00	0.0	0.0	0.04	0.14	0.00
2	0.0	0.00	0.01	0.0	0.0	0.52	0.0	0.00	0.0	0.0	0.0	0.03
3	0.0	0.00	0.02	0.0	0.14	0.02	0.00	0.00	0.01	0.0	0.00	0.08
4	0.0	0.04	0.03	0.0	0.00	0.13	0.0	0.0	0.0	0.0	0.06	0.07
5	0.0	0.02	0.0	0.0	0.0	0.02	0.00	0.07	0.00	0.0	0.00	0.39
6	0.01	0.0	0.00	0.00	0.52	0.00	0.0	0.11	0.24	0.0	0.0	0.09
7	0.06	0.0	0.0	0.13	0.00	0.01	0.00	0.00	0.0	0.0	0.0	0.0
8	0.36	0.0	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.13
9	0.03	0.01	0.02	0.01	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.07
10	0.02	0.05	0.02	0.11	0.0	0.08	0.00	0.0	0.0	0.0	0.0	0.04
11	0.09	0.0	0.05	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.01
12	0.08	0.0	1.05	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.25	0.09
13	0.03	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.04	0.16	0.05
14	0.05	0.0	0.03	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.05
15	0.05	0.14	0.03	0.03	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	0.16	0.0	0.26	0.18	0.04	0.0	0.0	0.0	0.0	0.28	0.0	0.0
17	0.91	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0
18	0.24	0.05	0.0	0.11	0.0	0.00	0.0	0.0	0.0	0.00	0.05	0.00
19	0.02	0.05	0.01	0.0	0.01	0.0	0.08	0.0	0.0	0.18	0.00	0.0
20	0.09	0.0	0.0	0.12	0.00	0.0	0.0	0.00	0.00	0.01	0.0	0.0
21	0.0	0.0	0.0	0.01	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.0
22	0.03	0.0	0.20	0.00	0.00	0.0	0.08	0.0	0.0	0.0	0.0	0.19
23	0.03	0.0	0.41	0.17	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.08
24	0.01	0.03	0.07	0.03	0.00	0.0	0.0	0.0	0.0	0.0	0.07	0.00
25	0.18	0.00	0.21	0.00	0.01	0.56	0.0	0.0	0.0	0.0	0.04	0.25
26	0.00	0.0	0.14	0.01	0.03	0.81	0.0	0.0	0.16	0.08	1.37	0.02
27	0.00	0.02	0.02	0.0	0.01	0.27	0.0	0.0	0.00	0.07	0.07	0.0
28	0.0	0.05	0.0	0.0	0.00	0.19	0.0	0.0	0.05	0.0	0.11	0.00
29	0.00	0.0	0.0	0.00	0.01	0.00	0.0	0.0	0.38	0.05	0.28	0.0
30	0.0	0.00	0.09	0.00	0.00	0.0	0.0	0.00	1.18	0.15	0.05	0.00
31	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.01	0.05	0.00
TOTAL	2.46	0.54	2.69	1.01	0.89	2.72	0.24	0.53	2.02	0.97	2.63	1.70
STA AV												

NOTES: Values are Thiessen weighted average amounts from 9 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1971	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.00	0.0	0.0	0.12	0.00	0.0	0.0	0.05	0.20	0.01
2	0.0	0.00	0.01	0.0	0.0	0.57	0.0	0.00	0.0	0.0	0.0	0.03
3	0.0	0.00	0.03	0.0	0.17	0.02	0.00	0.00	0.01	0.0	0.00	0.10
4	0.0	0.05	0.04	0.0	0.00	0.13	0.0	0.0	0.0	0.0	0.07	0.08
5	0.0	0.06	0.0	0.0	0.0	0.02	0.00	0.07	0.00	0.0	0.01	0.46
6	0.01	0.0	0.00	0.00	0.59	0.00	0.0	0.12	0.26	0.0	0.0	0.11
7	0.08	0.0	0.0	0.15	0.00	0.01	0.00	0.00	0.0	0.0	0.0	0.0
8	0.44	0.0	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.16
9	0.04	0.01	0.03	0.01	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.08
10	0.03	0.07	0.03	0.13	0.0	0.08	0.00	0.0	0.0	0.0	0.0	0.06
11	0.13	0.0	0.06	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.02
12	0.12	0.0	1.22	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.28	0.15
13	0.03	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.05	0.18	0.09
14	0.07	0.0	0.04	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.09
15	0.06	0.19	0.04	0.05	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.03
16	0.18	0.0	0.35	0.24	0.04	0.0	0.0	0.0	0.0	0.34	0.0	0.0
17	0.98	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0
18	0.26	0.10	0.0	0.15	0.0	0.0	0.00	0.0	0.0	0.00	0.06	0.00
19	0.02	0.09	0.01	0.0	0.01	0.0	0.08	0.0	0.0	0.21	0.00	0.0
20	0.11	0.0	0.0	0.15	0.00	0.0	0.0	0.00	0.00	0.01	0.0	0.0
21	0.0	0.0	0.0	0.02	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.0
22	0.03	0.23	0.00	0.00	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.23
23	0.04	0.0	0.48	0.23	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.10
24	0.01	0.05	0.08	0.05	0.00	0.0	0.0	0.0	0.0	0.0	0.08	0.00
25	0.22	0.01	0.25	0.00	0.01	0.59	0.0	0.0	0.0	0.0	0.05	0.32
26	0.00	0.0	0.17	0.01	0.03	0.85	0.0	0.0	0.19	0.11	1.60	0.03
27	0.00	0.03	0.03	0.0	0.01	0.29	0.0	0.0	0.00	0.09	0.08	0.0
28	0.0	0.08	0.0	0.0	0.00	0.20	0.0	0.0	0.06	0.0	0.13	0.00
29	0.00	0.0	0.0	0.00	0.01	0.00	0.0	0.34	0.47	0.0	0.28	0.06
30	0.0	0.0	0.11	0.00	0.00	0.0	0.0	0.00	1.48	0.20	0.07	0.01
31	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.01	0.0	0.0
TOTAL	2.86	0.84	3.21	1.30	1.03	2.91	0.25	0.54	2.47	1.21	3.09	2.20
STA AV												

NOTES: Values are Thiessen weighted average amounts from 9 shielded recording gages. STA AV do not apply to shielded rain gage records.

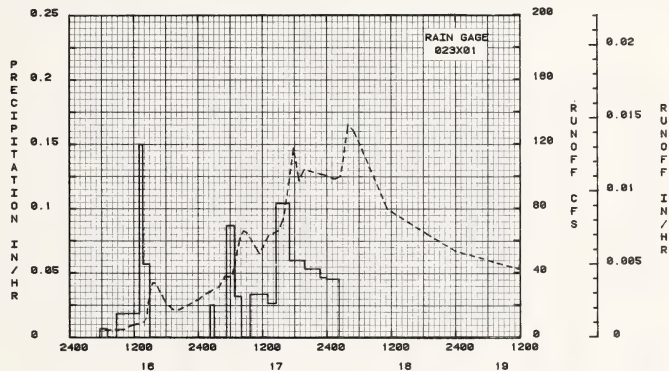
1971 NEAN DAILY DISCHARGE (cfs)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (0466017)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.537	6.479	2.727	12.757	4.501	2.026	1.268	0.109	0.093	1.235	1.127	2.718	1	1.537	6.479	2.727	12.757	4.501	2.026	1.268	0.109	0.093	1.235	1.127	2.718
2	1.275	6.014	2.695	11.515	4.435	2.572	1.145	0.063	0.111	1.021	1.052	3.899	2	1.275	6.014	2.695	11.515	4.435	2.572	1.145	0.063	0.111	1.021	1.052	3.899
3	1.652	5.029	2.643	10.294	4.529	2.096	1.031	0.054	0.181	1.366	1.063	3.659	3	1.652	5.029	2.643	10.294	4.529	2.096	1.031	0.054	0.181	1.366	1.063	3.659
4	1.468	5.242	2.404	9.228	4.046	2.110	0.910	0.045	0.106	1.599	1.191	3.467	4	1.468	5.242	2.404	9.228	4.046	2.110	0.910	0.045	0.106	1.599	1.191	3.467
5	1.460	4.634	2.633	8.751	4.223	1.838	0.737	0.041	0.095	1.682	1.055	13.236	5	1.460	4.634	2.633	8.751	4.223	1.838	0.737	0.041	0.095	1.682	1.055	13.236
6	1.788	4.409	2.541	8.437	4.868	1.666	0.987	0.058	0.122	1.557	0.991	24.126	6	1.788	4.409	2.541	8.437	4.868	1.666	0.987	0.058	0.122	1.557	0.991	24.126
7	1.737	5.616	2.350	8.694	4.482	1.553	0.790	0.036	0.141	1.451	1.111	7.771	7	1.737	5.616	2.350	8.694	4.482	1.553	0.790	0.036	0.141	1.451	1.111	7.771
8	4.126	4.428	2.295	7.778	4.071	1.466	0.398	0.031	0.148	1.328	1.077	7.091	8	4.126	4.428	2.295	7.778	4.071	1.466	0.398	0.031	0.148	1.328	1.077	7.091
9	12.037	3.680	2.247	7.374	3.724	1.411	0.398	0.029	0.124	1.264	1.121	7.050	9	12.037	3.680	2.247	7.374	3.724	1.411	0.398	0.029	0.124	1.264	1.121	7.050
10	7.072	4.353	2.335	7.670	3.519	1.474	0.386	0.024	0.149	1.216	1.143	5.414	10	7.072	4.353	2.335	7.670	3.519	1.474	0.386	0.024	0.149	1.216	1.143	5.414
11	5.277	3.911	2.508	6.962	3.335	1.408	0.472	0.016	0.149	1.172	1.165	4.585	11	5.277	3.911	2.508	6.962	3.335	1.408	0.472	0.016	0.149	1.172	1.165	4.585
12	4.279	3.728	5.453	6.315	3.248	1.272	0.474	0.016	0.154	1.166	1.210	4.215	12	4.279	3.728	5.453	6.315	3.248	1.272	0.474	0.016	0.154	1.166	1.210	4.215
13	3.393	3.663	7.747	5.885	3.104	1.184	0.439	0.016	0.176	1.126	1.233	3.859	13	3.393	3.663	7.747	5.885	3.104	1.184	0.439	0.016	0.176	1.126	1.233	3.859
14	3.721	3.649	5.318	5.809	2.371	1.016	0.388	0.019	0.148	1.141	1.255	3.630	14	3.721	3.649	5.318	5.809	2.371	1.016	0.388	0.019	0.148	1.141	1.255	3.630
15	3.514	3.799	4.897	5.716	1.740	0.845	0.366	0.023	0.195	1.147	1.301	3.272	15	3.514	3.799	4.897	5.716	1.740	0.845	0.366	0.023	0.195	1.147	1.301	3.272
16	12.339	3.433	4.737	5.704	2.234	0.668	0.337	0.019	0.190	1.252	1.324	3.024	16	12.339	3.433	4.737	5.704	2.234	0.668	0.337	0.019	0.190	1.252	1.324	3.024
17	66.236	3.608	4.720	5.985	1.971	0.650	0.269	0.019	0.183	1.466	1.324	2.824	17	66.236	3.608	4.720	5.985	1.971	0.650	0.269	0.019	0.183	1.466	1.324	2.824
18	85.064	3.550	4.933	6.232	1.861	0.658	0.360	0.023	0.286	1.281	1.324	2.633	18	85.064	3.550	4.933	6.232	1.861	0.658	0.360	0.023	0.286	1.281	1.324	2.633
19	47.614	3.373	4.973	5.649	2.054	0.679	0.429	0.023	0.198	1.378	1.324	3.058	19	47.614	3.373	4.973	5.649	2.054	0.679	0.429	0.023	0.198	1.378	1.324	3.058
20	33.926	3.195	5.922	5.761	2.223	0.618	0.336	0.023	0.217	1.371	1.324	3.024	20	33.926	3.195	5.922	5.761	2.223	0.618	0.336	0.023	0.217	1.371	1.324	3.024
21	20.056	3.252	7.055	5.690	2.257	0.430	0.240	0.023	0.228	1.277	1.324	2.906	21	20.056	3.252	7.055	5.690	2.257	0.430	0.240	0.023	0.228	1.277	1.324	2.906
22	13.349	3.058	13.197	5.249	2.028	0.483	0.249	0.023	0.218	1.196	1.324	3.404	22	13.349	3.058	13.197	5.249	2.028	0.483	0.249	0.023	0.218	1.196	1.324	3.404
23	10.979	2.894	36.607	5.679	1.918	0.448	0.313	0.027	0.206	1.181	1.228	4.624	23	10.979	2.894	36.607	5.679	1.918	0.448	0.313	0.027	0.206	1.181	1.228	4.624
24	8.661	2.931	34.125	5.727	1.918	0.432	0.275	0.035	0.178	1.179	1.296	3.730	24	8.661	2.931	34.125	5.727	1.918	0.432	0.275	0.035	0.178	1.179	1.296	3.730
25	8.472	2.956	26.683	5.647	1.860	0.635	0.261	0.051	0.217	1.127	1.371	3.734	25	8.472	2.956	26.683	5.647	1.860	0.635	0.261	0.051	0.217	1.127	1.371	3.734
26	9.365	2.889	35.864	5.454	1.857	1.451	0.258	0.062	0.324	1.121	10.688	3.493	26	9.365	2.889	35.864	5.454	1.857	1.451	0.258	0.062	0.324	1.121	10.688	3.493
27	7.954	2.791	28.893	5.292	1.816	1.467	0.233	0.062	0.355	1.137	13.391	3.493	27	7.954	2.791	28.893	5.292	1.816	1.467	0.233	0.062	0.355	1.137	13.391	3.493
28	7.040	2.727	22.856	4.957	1.814	1.402	0.194	0.062	0.346	0.540	6.935	3.493	28	7.040	2.727	22.856	4.957	1.814	1.402	0.194	0.062	0.346	0.540	6.935	3.493
29	6.374	15.209	4.784	1.836	1.309	0.146	0.272	0.561	0.695	6.397	3.418	1.814	29	6.374	15.209	4.784	1.836	1.309	0.146	0.272	0.561	0.695	6.397	3.418	1.814
30	6.232	16.726	4.603	1.772	1.377	0.133	0.132	0.338	0.869	5.051	3.270	1.814	30	6.232	16.726	4.603	1.772	1.377	0.133	0.132	0.338	0.869	5.051	3.270	1.814
31	6.648	14.416		1.929		0.119	0.080		1.034		3.128	1.814	31	6.648	14.416		1.929		0.119	0.080		1.034		3.128	1.814
NEAN	13.066	3.903	10.703	6.853	2.837	1.221	0.461	0.049	0.237	1.212	2.424	4.927	NEAN	13.066	3.903	10.703	6.853	2.837	1.221	0.461	0.049	0.237	1.212	2.424	4.927
INCHES	1.072	0.289	0.878	0.544	0.233	0.097	0.038	0.004	0.019	0.099	0.193	0.404	INCHES	1.072	0.289	0.878	0.544	0.233	0.097	0.038	0.004	0.019	0.099	0.193	0.404
STA AV	0.616	0.358	0.399	0.431	0.301	0.134	0.027	0.041	0.022	0.045	0.088	0.161	STA AV	0.616	0.358	0.399	0.431	0.301	0.134	0.027	0.041	0.022	0.045	0.088	0.161

NOTES: To convert CFS to IN/DAY, multiply by 0.002648. STA AV amounts are based on 1963-71 record period.

1971 SELECTED RUNOFF EVENT						REYNOLDS, IDAHO SALMON CREEK WATERSHED (0466017)					
AFFECTED CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 16 - 19, 1971											
1-16	RG 023X01	0.003	1-16	RG 023X01			1-16	640	8.418	0.0	
	0.01			533	0.0	0.0		1010	5.103	0.0018	
				701	0.0068	0.01		1122	7.512	0.0026	
				843	0.0	0.01		1248	8.518	0.0039	
				1301	0.0186	0.09		1346	9.453	0.0049	
				1341	0.1500	0.19					
WATERSHED CONDITIONS:											
Runoff event was caused by a sustained winter rain following about 10 days of intermittent rain and snowmelt.											
			1-17	1455	0.0568	0.26		1418	11.949	0.0055	
				212	0.0	0.26		1454	26.919	0.0068	
				300	0.0250	0.28		1528	33.848	0.0087	
				516	0.0	0.28		1556	33.848	0.0104	
				646	0.0867	0.41		1756	21.262	0.0165	
				802	0.0316	0.45		1922	16.992	0.0195	
				940	0.0	0.45		2022	16.992	0.0214	
				1258	0.0333	0.56		2400	23.508	0.0295	
				1430	0.0261	0.60	1-17	154	28.097	0.0349	
				1700	0.1040	0.86		346	31.105	0.0410	
				1952	0.0593	1.03		456	37.750	0.0454	
				2242	0.0529	1.18		556	37.750	0.0496	
				2400	0.0462	1.24		626	39.286	0.0517	
			1-18	214	0.0448	1.34		746	61.800	0.0591	
								826	66.110	0.0638	
								908	64.652	0.0689	
								1122	51.853	0.0833	
								1308	63.215	0.0945	
								1456	66.110	0.1073	
								1554	73.731	0.1148	
								1654	95.297	0.1241	
								1748	117.441	0.1347	
								1848	97.184	0.1465	
								1946	103.584	0.1572	
								2400	100.061	0.2046	

1971 SELECTED RUNOFF EVENT					REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF JANUARY 16 - 19, 1971 (CONTINUED)									
							1-18	128	98.136
								234	100.061
								358	112.012
								506	127.408
								1114	79.401
								1834	63.931
								2400	53.113
							1-19	1148	41.943
								1622	53.113
								2400	42.486

NOTES: To convert CFS to IIS/HS, multiply by .0001103.



EVENT OF JANUARY 16 - 19, 1971  
REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

## REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)

LOCATION: Owyhee County, Idaho; 34 miles south of Hampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 7846.00 acres 12.26 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	3.04	1.09	3.30	1.23	1.01	2.67	0.30	0.60	1.90	1.43	2.78	2.77	22.12												
1971 Q	1.358	0.330	1.074	0.598	0.129	0.070	0.020	0.006	0.004	0.016	0.082	0.222	3.909												
STA AV P	3.72	1.25	1.71	1.43	1.05	2.03	0.21	1.04	0.98	1.42	2.25	2.00	19.09												
Q	0.665	0.218	0.404	0.338	0.121	0.061	0.011	0.003	0.002	0.004	0.022	0.076	1.925												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
	Maximum Discharge Date	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date																	
1971	1-18 0.036	1-18 0.033	1-18 0.064	1-18 0.162	1-18 0.265	1-17 0.436	1-17 0.632	1-16 1.013																	
MAXIMUMS FOR PERIOD OF RECORD																									
	1-21 0.039	1-21 0.037	1-20 0.069	1-20 0.183	1-20 0.294	1-20 0.457	1-20 0.649	1-16 1.013																	
	1969	1969	1969	1969	1969	1969	1969	1971																	

NOTES: Watershed conditions: The watershed topography is steep, except in the lower valley, with numerous basalt outcrops at the higher elevations. 98% is sagebrush rangeland with a varying cover of sagebrush, bitterbrush, mountain mahogany and willow with a fair cover of forage plants such as cheatgrass, bluebunch wheatgrass, and Idaho fescue. 35% of area has a vegetative cover of 0-25%, 33% of the area has a vegetative cover of 26-50%, 19% of area has a vegetative cover of 51-75%, and 12% of the area has a vegetative cover of 76-100%. 2% of area is in pasture and hay crops which receives limited irrigation. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 68, 3-4. Records began 1963. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 12 rain gages. Station average precipitation amounts are based on 1968-71 record period. Station average streamflow amounts are based on 1963-71. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles S.E. of watershed.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO BACKS CREEK WATERSHED (046084)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.00	0.0	0.00	0.14	0.00	0.0	0.00	0.01	0.14	0.0													
2	0.00	0.00	0.00	0.0	0.0	0.40	0.00	0.03	0.01	0.0	0.0	0.03													
3	0.0	0.0	0.03	0.0	0.27	0.01	0.00	0.02	0.02	0.0	0.00	0.10													
4	0.0	0.07	0.04	0.0	0.01	0.13	0.00	0.00	0.0	0.0	0.03	0.15													
5	0.00	0.02	0.0	0.0	0.00	0.0	0.00	0.07	0.00	0.0	0.01	0.57													
6	0.01	0.0	0.0	0.00	0.40	0.0	0.00	0.11	0.12	0.0	0.0	0.25													
7	0.05	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.00													
8	0.75	0.00	0.0	0.0	0.02	0.01	0.00	0.0	0.0	0.0	0.0	0.22													
9	0.02	0.01	0.03	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.11													
10	0.03	0.16	0.10	0.21	0.0	0.00	0.01	0.0	0.0	0.0	0.0	0.04													
11	0.10	0.0	0.07	0.0	0.00	0.00	0.0	0.0	0.00	0.0	0.01	0.01													
12	0.09	0.0	1.20	0.02	0.00	0.01	0.0	0.01	0.0	0.01	0.32	0.15													
13	0.03	0.0	0.01	0.00	0.01	0.0	0.0	0.0	0.0	0.08	0.13	0.09													
14	0.03	0.00	0.01	0.04	0.00	0.00	0.0	0.0	0.0	0.02	0.01	0.13													
15	0.07	0.18	0.02	0.02	0.03	0.0	0.00	0.0	0.0	0.0	0.00	0.02													
16	0.10	0.0	0.36	0.22	0.07	0.00	0.00	0.0	0.00	0.43	0.0	0.0													
17	0.94	0.17	0.00	0.02	0.00	0.0	0.0	0.0	0.0	0.16	0.0	0.0													
18	0.31	0.19	0.0	0.09	0.00	0.00	0.0	0.0	0.0	0.01	0.10	0.00													
19	0.04	0.05	0.00	0.01	0.01	0.00	0.00	0.0	0.0	0.19	0.00	0.00													
20	0.09	0.00	0.01	0.24	0.00	0.0	0.05	0.00	0.02	0.03	0.00	0.0													
21	0.00	0.00	0.0	0.03	0.00	0.0	0.03	0.0	0.0	0.00	0.0	0.0													
22	0.05	0.0	0.32	0.01	0.0	0.0	0.03	0.00	0.0	0.01	0.0	0.31													
23	0.07	0.02	0.55	0.11	0.00	0.0	0.02	0.00	0.0	0.00	0.0	0.08													
24	0.01	0.04	0.04	0.03	0.0	0.0	0.00	0.0	0.00	0.0	0.11	0.00													
25	0.21	0.01	0.23	0.02	0.01	0.58	0.00	0.0	0.02	0.0	0.03	0.39													
26	0.02	0.00	0.14	0.01	0.03	0.01	0.0	0.0	0.23	0.15	1.27	0.04													
27	0.01	0.00	0.00	0.00	0.00	0.03	0.29	0.00	0.03	0.0	0.05	0.01													
28	0.0	0.09	0.0	0.0	0.00	0.17	0.00	0.0	0.06	0.0	0.13	0.00													
29	0.00	0.0	0.00	0.01	0.01	0.0	0.35	0.55	0.0	0.38	0.03														
30	0.0	0.09	0.0	0.01	0.00	0.0	0.01	0.84	0.22	0.05	0.02														
31	0.00	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.05	0.0	0.01														
TOTAL	3.04	1.09	3.30	1.23	1.01	2.67	0.30	0.60	1.90	1.43	2.78	2.77													
STA AV	3.72	1.25	1.71	1.43	1.05	2.03	0.21	1.04	0.98	1.42	2.25	2.00													

NOTES: Values are Thiessen weighted average 'Actual' amounts from 12 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by H. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IDBS Symposium, Gello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) + 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on a yr (1968-71) record period. For temperature information, see table of daily maximum and minimum values included for watershed 68.001.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO RACKS CREEK WATERSHED (046004)													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.00	0.13	0.00	0.0	0.00	0.01	0.10	0.0	1	0.0	0.0	0.0	0.0	0.00	0.13	0.00	0.0	0.00	0.01	0.10	0.0	
2	0.00	0.00	0.00	0.0	0.0	0.37	0.00	0.03	0.01	0.0	0.0	0.02	2	0.00	0.00	0.00	0.0	0.00	0.37	0.00	0.03	0.01	0.0	0.0	0.02	
3	0.0	0.0	0.02	0.0	0.24	0.01	0.00	0.02	0.02	0.0	0.00	0.06	3	0.0	0.0	0.02	0.0	0.24	0.01	0.00	0.02	0.02	0.0	0.00	0.06	
4	0.05	0.02	0.0	0.0	0.01	0.12	0.00	0.00	0.00	0.02	0.0	0.08	4	0.05	0.02	0.0	0.0	0.01	0.12	0.00	0.00	0.02	0.0	0.0	0.08	
5	0.00	0.01	0.0	0.0	0.00	0.00	0.0	0.07	0.00	0.0	0.01	0.32	5	0.00	0.01	0.0	0.0	0.00	0.00	0.0	0.07	0.00	0.0	0.01	0.32	
6	0.00	0.0	0.0	0.00	0.33	0.0	0.00	0.10	0.11	0.0	0.0	0.14	6	0.00	0.0	0.0	0.00	0.33	0.0	0.00	0.10	0.11	0.0	0.0	0.14	
7	0.04	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	7	0.04	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	
8	0.50	0.00	0.0	0.0	0.01	0.01	0.00	0.0	0.0	0.0	0.0	0.12	8	0.50	0.00	0.0	0.0	0.01	0.01	0.00	0.0	0.0	0.0	0.0	0.12	
9	0.01	0.00	0.02	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.06	9	0.01	0.00	0.02	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.06	
10	0.02	0.10	0.08	0.11	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.02	10	0.02	0.10	0.08	0.11	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.02	
11	0.07	0.0	0.05	0.0	0.00	0.00	0.0	0.0	0.00	0.0	0.01	0.00	11	0.07	0.0	0.05	0.0	0.00	0.00	0.0	0.0	0.00	0.0	0.01	0.00	
12	0.06	0.0	0.01	0.01	0.00	0.01	0.0	0.01	0.0	0.01	0.24	0.06	12	0.06	0.0	0.01	0.01	0.00	0.01	0.0	0.01	0.0	0.24	0.06		
13	0.02	0.0	0.01	0.00	0.01	0.0	0.0	0.0	0.0	0.0	0.06	0.09	13	0.02	0.0	0.01	0.00	0.01	0.0	0.0	0.0	0.0	0.06	0.09	0.04	
14	0.03	0.00	0.01	0.03	0.00	0.00	0.0	0.0	0.0	0.0	0.01	0.07	14	0.03	0.00	0.01	0.03	0.00	0.00	0.0	0.0	0.0	0.01	0.01	0.07	
15	0.06	0.12	0.01	0.01	0.03	0.0	0.00	0.00	0.00	0.00	0.0	0.01	15	0.06	0.12	0.01	0.01	0.03	0.0	0.00	0.00	0.00	0.0	0.0	0.01	
16	0.08	0.0	0.25	0.15	0.06	0.00	0.00	0.00	0.00	0.33	0.0	0.0	16	0.08	0.0	0.25	0.15	0.06	0.00	0.00	0.00	0.33	0.0	0.0	0.0	
17	0.79	0.09	0.00	0.01	0.00	0.0	0.0	0.0	0.0	0.13	0.0	0.0	17	0.79	0.09	0.00	0.01	0.00	0.0	0.0	0.0	0.13	0.0	0.0	0.0	
18	0.25	0.09	0.0	0.04	0.00	0.00	0.0	0.0	0.0	0.0	0.01	0.08	18	0.25	0.09	0.0	0.04	0.00	0.00	0.0	0.0	0.0	0.01	0.08	0.00	
19	0.03	0.03	0.00	0.0	0.01	0.0	0.10	0.0	0.0	0.14	0.00	0.00	19	0.03	0.03	0.00	0.0	0.01	0.0	0.10	0.0	0.0	0.14	0.00	0.00	
20	0.07	0.0	0.01	0.16	0.00	0.0	0.04	0.00	0.01	0.02	0.00	0.0	20	0.07	0.0	0.01	0.16	0.00	0.0	0.04	0.00	0.01	0.02	0.00	0.0	
21	0.00	0.0	0.0	0.02	0.00	0.0	0.02	0.0	0.0	0.00	0.0	0.0	21	0.00	0.0	0.0	0.02	0.00	0.0	0.02	0.0	0.0	0.00	0.0	0.0	
22	0.04	0.0	0.25	0.01	0.0	0.0	0.03	0.00	0.0	0.00	0.0	0.24	22	0.04	0.0	0.25	0.01	0.0	0.0	0.03	0.00	0.0	0.00	0.0	0.24	
23	0.06	0.00	0.43	0.07	0.00	0.0	0.02	0.00	0.0	0.00	0.0	0.06	23	0.06	0.00	0.43	0.07	0.00	0.0	0.02	0.00	0.0	0.00	0.0	0.06	
24	0.01	0.02	0.04	0.01	0.0	0.0	0.00	0.0	0.00	0.0	0.08	0.00	24	0.01	0.02	0.04	0.01	0.0	0.0	0.00	0.0	0.0	0.08	0.00	0.00	
25	0.17	0.00	0.18	0.01	0.01	0.58	0.00	0.0	0.00	0.0	0.02	0.30	25	0.17	0.00	0.18	0.01	0.01	0.58	0.00	0.0	0.00	0.0	0.02	0.30	
26	0.01	0.0	0.10	0.00	0.03	0.80	0.0	0.0	0.15	0.10	0.99	0.00	26	0.01	0.0	0.10	0.00	0.03	0.80	0.0	0.0	0.15	0.10	0.99	0.00	
27	0.00	0.01	0.01	0.0	0.01	0.29	0.01	0.00	0.02	0.04	0.04	0.00	27	0.00	0.01	0.01	0.0	0.01	0.29	0.01	0.00	0.02	0.04	0.04	0.00	
28	0.0	0.04	0.0	0.0	0.00	0.17	0.00	0.0	0.04	0.0	0.07	0.00	28	0.0	0.04	0.0	0.0	0.00	0.17	0.00	0.0	0.04	0.0	0.07	0.00	
29	0.00	0.0	0.0	0.00	0.01	0.01	0.0	0.33	0.37	0.0	0.19	0.03	29	0.00	0.0	0.0	0.00	0.01	0.01	0.0	0.33	0.37	0.0	0.19	0.03	
30	0.0	0.06	0.0	0.0	0.01	0.00	0.0	0.01	0.56	0.15	0.02	0.01	30	0.0	0.06	0.0	0.0	0.01	0.00	0.0	0.01	0.56	0.15	0.02	0.01	
31	0.00	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.03	0.03	0.01	0.01	31	0.00	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.03	0.03	0.01	0.01	
TOTAL													2.35	TOTAL												
STA AV													0.57	STA AV												

NOTES: Values are Thiessen weighted average amounts from 12 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO RACKS CREEK WATERSHED (046004)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.13	0.00	0.0	0.00	0.12	0.0	1	0.0	0.0	0.00	0.0	0.00	0.13	0.00	0.0	0.01	0.12	0.0
2	0.00	0.00	0.00	0.00	0.0	0.0	0.40	0.00	0.00	0.03	0.01	0.0	0.0	2	0.00	0.00	0.00	0.00	0.0	0.40	0.00	0.03	0.0	0.0	0.03
3	0.0	0.0	0.0	0.02	0.0	0.26	0.01	0.00	0.02	0.02	0.0	0.00	0.07	3	0.0	0.0	0.02	0.0	0.26	0.01	0.00	0.02	0.0	0.00	0.07
4	0.0	0.06	0.0	0.01	0.0	0.13	0.00	0.00	0.0	0.0	0.0	0.11	0.0	4	0.0	0.06	0.0	0.01	0.0	0.13	0.00	0.00	0.0	0.0	0.11
5	0.00	0.01	0.0	0.0	0.0	0.00	0.0	0.00	0.07	0.00	0.0	0.01	0.44	5	0.00	0.01	0.0	0.0	0.00	0.0	0.07	0.00	0.0	0.01	0.44
6	0.01	0.0	0.0	0.0	0.00	0.37	0.0	0.00	0.10	0.12	0.0	0.0	0.19	6	0.01	0.0	0.0	0.0	0.00	0.37	0.0	0.10	0.12	0.0	0.19
7	0.04	0.00	0.00	0.0	0.14	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	7	0.04	0.00	0.00	0.0	0.14	0.00	0.00	0.00	0.00	0.0	0.00
8	0.62	0.00	0.0	0.01	0.0	0.01	0.01	0.00	0.0	0.0	0.0	0.0	0.17	8	0.62	0.00	0.0	0.01	0.0	0.01	0.01	0.00	0.0	0.0	0.17
9	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.08	0.0	9	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.08
10	0.02	0.13	0.09	0.09	0.15	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.03	10	0.02	0.13	0.09	0.09	0.15	0.0	0.10	0.01	0.0	0.0	0.03
11	0.08	0.0	0.06	0.0	0.0	0.00	0.00	0.0	0.0	0.00	0.0	0.01	0.00	11	0.08	0.0	0.06	0.0	0.0	0.00	0.00	0.0	0.0	0.01	0.00
12	0.07	0.0	1.06	0.01	0.00	0.00	0.01	0.0	0.0	0.01	0.0	0.28	0.11	12	0.07	0.0	1.06	0.01	0.00	0.00	0.01	0.0	0.0	0.28	0.11
13	0.03	0.0	0.01	0.00	0.01	0.0	0.0	0.0	0.0	0.0	0.07	0.11	0.06	13	0.03	0.0	0.01	0.00	0.01	0.0	0.0	0.0	0.07	0.11	0.06
14	0.03	0.00	0.01	0.03	0.00	0.00	0.00	0.0	0.0	0.0	0.01	0.10	0.0	14	0.03	0.00	0.01	0.03	0.00	0.00	0.00	0.0	0.0	0.01	0.10
15	0.07	0.15	0.02	0.02	0.03	0.0	0.00	0.0	0.0	0.0	0.0	0.00	0.01	15	0.07	0.15	0.02	0.02	0.03	0.0	0.00	0.0	0.0	0.00	0.01
16	0.09	0.0	0.30	0.18	0.06	0.00	0.00	0.0	0.0	0.00	0.39	0.0	0.0	16	0.09	0.0	0.30	0.18	0.06	0.00	0.00	0.0	0.0	0.39	0.0
17	0.87	0.13	0.00	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	17	0.87	0.13	0.00	0.01	0.00	0.0	0.0	0.0	0.15	0.0	0.0
18	0.28	0.13	0.0	0.06	0.00	0.00	0.0	0.0	0.0	0.0	0.01	0.09	0.00	18	0.28	0.13	0.0	0.06	0.00	0.00	0.0	0.0	0.01	0.09	0.00
19	0.08	0.05	0.00	0.00	0.01	0.0	0.11	0.0	0.00	0.17	0.00	0.00	0.0	19	0.08	0.05	0.00	0.00	0.01	0.0	0.11	0.0	0.17	0.00	0.00
20	0.08	0.01	0.20	0.0	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.0	0.0	20	0.08	0.01	0.20	0.0	0.00	0.00	0.00	0.02	0.00	0.01	0.00
21	0.00	0.00	0.0	0.03	0.00	0.0	0.03	0.0	0.0	0.00	0.0	0.0	0.0	21	0.00	0.00	0.0	0.03	0.00	0.0	0.0	0.03	0.0	0.0	0.0
22	0.05	0.0	0.29	0.01	0.0	0.0	0.0	0.03	0.00	0.0	0.01	0.0	0.27	22	0.05	0.0	0.29	0.01	0.0	0.0	0.0	0.03	0.00	0.0	0.27
23	0.07	0.01	0.49	0.09	0.00	0.0	0.02	0.00	0.0	0.00	0.0	0.07	0.0	23	0.07	0.01	0.49	0.09	0.00	0.0	0.02	0.00	0.0	0.00	0.07
24	0.01	0.03	0.04	0.02	0.0	0.00	0.0	0.0	0.0	0.0	0.10	0.00	0.0	24	0.01	0.03	0.04	0.02	0.0	0.00	0.0	0.0	0.0	0.10	0.00
25	0.19	0.01	0.21	0.01	0.01	0.01	0.58	0.00	0.0	0.01	0.0	0.03	0.35	25	0.19	0.01	0.21	0.01	0.01	0.01	0.58	0.00	0.0	0.01	0.03
26	0.02	0.00	0.12	0.00	0.00	0.04	0.00	0.0	0.0	0.20	0.13	1.14	0.03	26	0.02	0.00	0.12	0.00	0.00	0.04	0.00	0.0	0.20	0.13	1.14
27	0.03	0.00	0.01	0.01	0.29	0.01	0.02	0.00	0.06	0.05	0.0	0.0	0.0	27	0.03	0.00	0.01	0.01	0.29	0.01	0.02	0.00	0.06	0.05	0.0
28	0.0	0.06	0.0	0.0	0.00	0.00	0.17	0.00	0.0	0.05	0.0	0.10	0.00	28	0.0	0.06	0.0	0.0	0.00	0.00	0.17	0.00	0.0	0.05	0.10
29	0.00	0.0	0.00	0.00	0.01	0.01	0.0	0.34	0.07	0.0	0.28	0.03	0.0	29	0.00	0.0	0.00	0.00	0.01	0.01	0.0	0.34	0.07	0.0	0.28
30	0.0	0.0	0.01	0.01	0.00	0.0	0.0	0.11	0.70	0.0	0.18	0.04	0.0	30	0.0	0.0	0.01	0.01	0.00	0.0	0.0	0.11	0.70	0.0	0.18
31	0.00	0.0	0.0	0.0	0.11	0.00	0.0	0.0	0.0	0.04	0.0	0.01	0.0	31	0.00	0.0	0.0	0.0	0.11	0.00	0.0	0.0	0.0	0.04	0.01
TOTAL STA AV													2.70 0.81 2.90 0.98 0.95 2.65 0.28 0.60 1.61 1.26 2.40 2.20												

REYNOLDS, IDAHO RACKS CREEK WATERSHED (0460804)												
1971 MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.76	6.94	2.34	12.69	3.07	0.90	0.44	0.09	0.05	0.05	0.37	1.19
2	0.49	6.21	2.12	11.57	2.80	1.11	0.39	0.10	0.06	0.05	0.31	1.34
3	0.41	6.75	2.24	10.87	2.94	1.19	0.34	0.07	0.06	0.05	0.31	1.24
4	0.30	5.13	2.03	9.72	3.20	1.68	0.33	0.06	0.06	0.04	0.40	1.34
5	0.23	4.16	1.85	8.80	2.61	1.34	0.31	0.06	0.06	0.04	0.36	5.85
6	0.33	3.69	1.94	8.10	3.12	1.09	0.28	0.07	0.06	0.04	0.27	15.22
7	0.52	3.84	1.85	9.24	2.94	1.06	0.28	0.07	0.05	0.04	0.36	2.16
8	5.84	3.67	1.86	8.03	2.54	0.94	0.27	0.06	0.04	0.05	0.42	2.17
9	16.87	3.47	1.89	7.48	2.24	0.84	0.25	0.05	0.04	0.05	0.47	3.02
10	8.72	5.49	2.23	8.22	1.97	0.81	0.25	0.05	0.05	0.05	0.50	2.52
11	3.77	4.03	3.79	7.24	1.66	0.84	0.27	0.05	0.05	0.06	0.54	2.30
12	2.23	3.84	13.12	6.04	1.14	0.69	0.25	0.05	0.05	0.09	0.85	2.29
13	1.41	3.42	10.30	5.62	1.01	0.73	0.24	0.06	0.05	0.12	0.97	2.03
14	2.05	3.04	6.02	5.50	0.96	0.62	0.20	0.07	0.05	0.13	0.90	1.32
15	4.55	4.32	5.42	5.49	0.81	0.55	0.20	0.08	0.05	0.14	0.83	1.72
16	11.49	3.73	4.63	5.28	0.95	0.54	0.17	0.06	0.06	0.17	0.60	1.58
17	84.68	3.84	5.22	5.67	0.89	0.54	0.17	0.05	0.06	0.27	0.53	1.57
18	123.47	3.72	4.61	5.99	0.90	0.55	0.17	0.05	0.05	0.30	0.65	1.47
19	45.49	3.85	4.62	5.02	0.93	0.49	0.21	0.06	0.05	0.30	0.60	1.39
20	28.86	3.73	7.09	5.15	0.69	0.46	0.21	0.05	0.04	0.34	0.64	1.38
21	16.77	3.47	11.00	5.31	0.42	0.46	0.16	0.06	0.04	0.28	0.64	1.39
22	10.75	3.13	21.16	4.79	0.37	0.40	0.16	0.06	0.04	0.25	0.63	2.14
23	10.42	3.00	55.12	5.16	0.31	0.34	0.15	0.07	0.03	0.25	0.60	3.22
24	9.10	2.86	33.82	4.97	0.29	0.33	0.14	0.06	0.02	0.26	0.69	1.99
25	8.64	2.75	21.52	4.79	0.30	0.33	0.14	0.04	0.02	0.25	0.71	1.99
26	11.78	2.61	32.13	4.85	0.36	0.87	0.14	0.04	0.03	0.28	3.09	1.57
27	9.18	2.54	23.82	4.52	0.48	0.93	0.12	0.05	0.05	0.29	4.32	1.21
28	7.67	2.50	20.98	3.96	0.53	1.22	0.11	0.05	0.05	0.16	2.01	1.99
29	6.78		19.22	3.64	0.60	0.71	0.09	0.06	0.03	0.16	1.87	1.53
30	6.71		15.60	3.39	0.72	0.49	0.10	0.07	0.03	0.25	1.63	1.49
31	7.29		14.50		0.78		0.09	0.06	0.33			1.51
MEAN	14.436	3.890	11.420	6.569	1.371	0.768	0.214	0.060	0.046	0.165	0.903	2.365
INCHES	1.358	0.330	1.074	0.598	0.129	0.070	0.020	0.006	0.016	0.062	0.222	0.222
STA AV	0.665	0.218	0.404	0.338	0.121	0.061	0.011	0.003	0.002	0.004	0.022	0.076

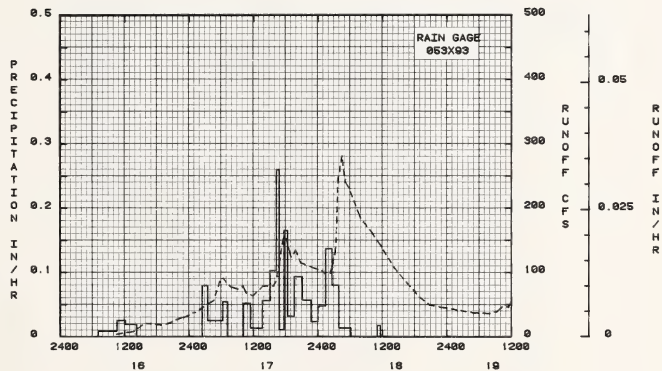
NOTES: To convert CFS to IN/DAY, multiply by 0.003034. STA AV amounts based on 1963-71 record period.

REYNOLDS, IDAHO RACKS CREEK WATERSHED (0460804)												
1971 SELECTED RUNOFF EVENT												
PRECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 16 - 19, 1971												
RG 053X93			RG 053X93									
1-16	0.0	0.005	1-16	706	0.0	0.0	1-16	1026	3.727	0.0		
				1032	0.0087	0.03		1134	5.757	0.0007		
				1207	0.0253	0.07		1344	8.230	0.0026		
				1412	0.0192	0.11		1518	18.063	0.0052		
			1-17	227	0.0	0.11		1604	20.081	0.0070		
WATERSHED CONDITIONS:												
Runoff event was caused by a sustained winter rain following about 10 days of intermittent rain and snowmelt.												
				327	0.0800	0.19		1654	20.081	0.0091		
				617	0.0247	0.26		1846	18.390	0.0136		
				712	0.0545	0.31		2002	20.081	0.0167		
				1007	0.0	0.31		2238	29.651	0.0249		
				1127	0.0525	0.38		2258	29.651	0.0261		
				1342	0.0133	0.41		2400	33.904	0.0303		
				1507	0.0565	0.49	1-17	44	37.479	0.0336		
				1617	0.1028	0.61		112	38.009	0.0358		
				1647	0.2600	0.74		440	57.036	0.0566		
				1743	0.0107	0.75		542	86.053	0.0659		
				1823	0.1650	0.86		620	90.729	0.0730		
				1938	0.0320	0.90		740	78.047	0.0872		
				2108	0.0933	1.04		808	73.821	0.1013		
				2243	0.0568	1.13		1000	78.911	0.1097		
				2400	0.0234	1.16		1042	67.382	0.1162		
			1-18	13	0.0462	1.17		1154	63.555	0.1261		
				128	0.0480	1.23		1346	78.911	0.1429		
				238	0.1371	1.39		1544	78.911	0.1625		
				353	0.0800	1.49		1612	86.053	0.1674		
				608	0.0133	1.52		1650	114.425	0.1754		
				1103	0.0	1.52		1728	148.435	0.1859		
				1138	0.0171	1.53		1754	159.259	0.1943		
								1900	123.545	0.2140		
								1952	134.369	0.2281		
								2048	114.425	0.2428		

NOTES: To convert CFS to IN/HR, multiply by .00012640.

1971 SELECTED RUNOFF EVENT						REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 16 - 19, 1971 (CONTINUED)											
							1-17	2400	104.715	0.2871	
							1-18	42	102.635	0.2963	
								128	96.560	0.3060	
								220	98.557	0.3167	
								316	131.911	0.3303	
								332	179.445	0.3355	
								342	242.671	0.3399	
								430	281.225	0.3664	
								504	240.842	0.3851	
								544	231.834	0.4050	
								756	183.981	0.4628	
								1000	162.045	0.5080	
								1144	140.647	0.5412	
								1406	107.889	0.5784	
								1634	83.326	0.6082	
								1902	60.599	0.6306	
								2046	49.059	0.6426	
								2400	44.177	0.6617	
							1-19	456	36.953	0.6870	
								758	35.917	0.7010	
								926	39.630	0.7080	
								1016	46.575	0.7125	
								1128	46.575	0.7196	
								1300	55.650	0.7295	
								1606	55.650	0.7513	
								2400	41.297	0.7997	

NOTES: To convert CFS to IN/HR, multiply by .00012640.



EVENT OF JANUARY 16 - 19, 1971  
REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)

## REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)

LOCATION: Owyhee County, Idaho; 40 miles south of Hampa; main stem of Reynolds Creek which is tributary to the Snake River.

AREA: 13453.00 acres 21.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	5.85	2.37	5.33	1.91	1.61	3.26	1.00	0.59	2.95	2.44	4.18	4.58	36.06										
Q	1.592	0.819	1.736	2.763	4.955	1.736	0.362	0.072	0.074	0.160	0.279	14.752											
STA AV P	6.56	2.23	2.53	1.99	1.34	2.33	0.56	1.40	1.18	2.10	3.43	4.14	30.19										
Q	0.949	0.569	0.918	1.643	3.493	1.553	0.284	0.042	0.032	0.082	0.175	0.223	5.823										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days			
Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Date	Vol.	Date	Date	Vol.	Vol.
1971	1-18	0.014	1-18	0.014	1-18	0.029	1-18	0.083	1-18	0.152	1-18	0.276	1-18	0.507	5-4	1.856							
MAXIMUMS FOR PERIOD OF RECORD																							
	1-21	0.030	1-21	0.029	1-21	0.057	1-21	0.157	1-21	0.283	1-20	0.454	1-20	0.612	5-4	1.856							
	1969		1969		1969		1969		1969		1969		1969		1971								

NOTES: Watershed condition - Watershed is generally sagebrush rangeland except for scattered stands of Douglas fir and aspen and mountain meadows. The topography is steep with numerous rock outcrops on the ridges. The watershed is used mainly for cattle grazing except during the winter when snow blankets most of the area. Vegetation consists predominantly of big sagebrush, little sagebrush, rabbitbrush, snowberry, blue bunch wheatgrass, Idaho fescue, and squirreltail grass. 25% of the area has a vegetative cover of 0-25%, 15% of the area has a vegetative cover of 26-50%, 15% of the area has a vegetative cover of 51-75%, and 45% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.4-6. Records began: Precipitation - 1963; Runoff - 1967. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 16 rain gages. Station average precipitation amounts are based on 1968-71 record period. Station average runoff amounts are based on 1967-71 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles S.W. of watershed.

SNOW COURSE DATA: DATE OF MEASUREMENT/AVERAGE WATER CONTENT (INCHES)																								
Course#	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches
144062	011371	9.40	021071	14.00	022471	15.10	031071	14.50	032371	17.10	040771	11.90												
155054	010871	7.55	011371	8.70	012771	10.50	022471	12.20	031071	13.75	032371	13.70												
155054	040671	10.10																						
163020	021071	12.80	022471	26.60	031071	28.80	032371	32.90	040771	38.60	042171	34.70												
163020	050571	30.10	051171	26.80	051971	21.20																		
163098	012771	25.10	021071	20.90	022471	28.80	031071	29.20	032371	33.10	040771	35.60												
163098	042171	34.20	050571	30.10	051171	23.90	051971	17.20																
167007	011371	9.30	012771	8.00	021071	7.60	032271	10.80	040671	9.60	042171	6.90												
174026	021071	23.20	022471	28.70	031071	28.90	032371	32.50	040771	36.20	042171	35.90												
174026	050571	31.00	051171	18.60	051971	15.00																		

NOTES: For snow course location information, see map on p. 68.001-6 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.00	0.0	0.00	0.00	0.00	0.21	0.01	0.01	0.00	0.33	0.26	0.00											
2	0.0	0.01	0.00	0.0	0.01	0.24	0.00	0.03	0.00	0.0	0.00	0.07											
3	0.0	0.00	0.15	0.00	0.19	0.08	0.0	0.01	0.01	0.0	0.00	0.14											
4	0.0	0.31	0.15	0.00	0.01	0.21	0.01	0.00	0.00	0.0	0.01	0.16											
5	0.03	0.0	0.00	0.00	0.00	0.02	0.00	0.13	0.00	0.0	0.00	0.75											
6	0.02	0.00	0.02	0.02	0.47	0.0	0.0	0.30	0.34	0.0	0.00	0.43											
7	0.04	0.00	0.00	0.23	0.03	0.02	0.0	0.01	0.0	0.0	0.0	0.02											
8	0.67	0.00	0.00	0.0	0.21	0.00	0.0	0.0	0.0	0.0	0.0	0.16											
9	0.13	0.02	0.06	0.01	0.00	0.04	0.0	0.00	0.0	0.0	0.00	0.19											
10	0.07	0.28	0.19	0.39	0.0	0.23	0.00	0.0	0.0	0.0	0.00	0.13											
11	0.25	0.00	0.23	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00	0.04											
12	0.10	0.0	1.11	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.34	0.37											
13	0.17	0.0	0.02	0.00	0.03	0.00	0.0	0.0	0.0	0.13	0.08	0.29											
14	0.28	0.00	0.09	0.01	0.01	0.0	0.00	0.0	0.0	0.07	0.00	0.22											
15	0.64	0.21	0.15	0.02	0.12	0.0	0.00	0.0	0.0	0.00	0.00	0.16											
16	0.41	0.03	0.75	0.10	0.27	0.0	0.0	0.0	0.00	0.60	0.0	0.02											
17	1.49	0.17	0.01	0.03	0.00	0.0	0.00	0.0	0.0	0.24	0.00	0.00											
18	0.67	0.54	0.0	0.06	0.00	0.00	0.01	0.0	0.0	0.00	0.11	0.0											
19	0.03	0.13	0.0	0.00	0.00	0.00	0.60	0.0	0.0	0.13	0.00	0.00											
20	0.07	0.00	0.0	0.28	0.01	0.00	0.00	0.0	0.02	0.13	0.00	0.0											
21	0.03	0.00	0.05	0.09	0.04	0.00	0.01	0.0	0.0	0.02	0.00	0.00											
22	0.25	0.00	0.46	0.02	0.01	0.0	0.34	0.0	0.0	0.0	0.00	0.44											
23	0.18	0.0	0.73	0.24	0.00	0.00	0.02	0.0	0.0	0.00	0.01	0.05											
24	0.00	0.29	0.08	0.18	0.00	0.0	0.00	0.0	0.00	0.04	0.14	0.02											
25	0.26	0.07	0.52	0.18	0.00	0.91	0.0	0.0	0.04	0.00	0.15	0.69											
26	0.03	0.00	0.40	0.02	0.02	0.95	0.00	0.0	0.08	0.25	1.62	0.01											
27	0.00	0.13	0.01	0.00	0.00	0.15	0.00	0.0	0.09	0.12	0.09	0.00											
28	0.0	0.16	0.0	0.0	0.00	0.19	0.0	0.0	0.07	0.01	0.42	0.0											
29	0.00	0.00	0.00	0.0	0.11	0.0	0.0	0.10	0.07	0.00	0.89	0.19											
30	0.00	0.14	0.14	0.01	0.00	0.00	1.83	0.0	0.36	0.05	0.02	0.0											
31	0.00	0.01	0.0	0.07	0.0	0.00	0.00	0.00	0.04	0.00	0.00	0.00											
TOTAL	5.45	2.37	5.33	1.91	1.61	3.26	1.00	0.59	2.95	1.88	4.18	4.58											
STA AV	6.56	2.23	2.53	1.99	1.34	2.33	0.56	1.40	1.18	2.10	3.83	4.14											

NOTES: Values are Thiessen weighted average "actual" amounts from 15 recording pairs of gauges (shielded and unshielded). "Actual" amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IBMS Symposium, Oslo, Norway, August, 1972. The equation used is:  $\log_e (D/A) = \log_e (0.75) \pm 1.80$ , where D = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 4 (1968-71) record period. For temperature information, see table of daily maxima and minimum values included for Watersheds 68.001 and 68.014.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.00	0.0	0.00	0.00	0.00	0.00	0.19	0.01	0.01	0.00	0.11	0.00											
2	0.0	0.01	0.00	0.0	0.00	0.22	0.00	0.03	0.00	0.0	0.00	0.04											
3	0.0	0.00	0.07	0.00	0.14	0.07	0.0	0.01	0.01	0.0	0.00	0.07											
4	0.0	0.16	0.06	0.00	0.00	0.19	0.01	0.00	0.00	0.0	0.01	0.09											
5	0.02	0.0	0.00	0.00	0.00	0.02	0.00	0.11	0.00	0.0	0.00	0.43											
6	0.01	0.00	0.01	0.01	0.40	0.0	0.0	0.26	0.30	0.0	0.00	0.26											
7	0.03	0.00	0.01	0.12	0.01	0.02	0.0	0.01	0.0	0.0	0.0	0.01											
8	0.50	0.0	0.00	0.0	0.18	0.00	0.0	0.0	0.0	0.0	0.0	0.08											
9	0.11	0.02	0.03	0.01	0.00	0.03	0.0	0.00	0.0	0.0	0.00	0.09											
10	0.05	0.19	0.10	0.21	0.0	0.18	0.00	0.0	0.0	0.0	0.00	0.06											
11	0.17	0.00	0.15	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00	0.01											
12	0.07	0.0	0.68	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.20	0.15											
13	0.11	0.01	0.00	0.00	0.02	0.00	0.0	0.0	0.06	0.0	0.16	0.12											
14	0.19	0.00	0.05	0.00	0.00	0.0	0.00	0.0	0.0	0.04	0.00	0.09											
15	0.39	0.08	0.08	0.01	0.08	0.0	0.00	0.0	0.0	0.00	0.00	0.07											
16	0.23	0.01	0.41	0.05	0.17	0.0	0.0	0.0	0.00	0.45	0.0	0.00											
17	0.95	0.07	0.01	0.01	0.00	0.0	0.00	0.0	0.0	0.17	0.00	0.00											
18	0.43	0.26	0.0	0.03	0.00	0.01	0.00	0.01	0.00	0.06	0.00	0.00											
19	0.02	0.06	0.0	0.00	0.00	0.0	0.56	0.0	0.0	0.08	0.00	0.0											
20	0.05	0.00	0.0	0.15	0.01	0.00	0.00	0.0	0.02	0.07	0.00	0.0											
21	0.02	0.00	0.03	0.04	0.02	0.00	0.01	0.0	0.0	0.01	0.00	0.00											
22	0.17	0.0	0.36	0.01	0.00	0.0	0.32	0.0	0.0	0.0	0.00	0.28											
23	0.13	0.0	0.58	0.12	0.00	0.00	0.01	0.0	0.0	0.00	0.01	0.03											
24	0.00	0.16	0.03	0.00	0.10	0.0	0.00	0.0	0.00	0.00	0.00	0.01											
25	0.19	0.03	0.42	0.10	0.00	0.83	0.0	0.0	0.02	0.00	0.11	0.37											
26	0.02	0.00	0.29	0.01	0.02	0.86	0.00	0.0	0.05	0.15	1.45	0.01											
27	0.00	0.06	0.00	0.00	0.00	0.14	0.00	0.0	0.06	0.06	0.07	0.00											
28	0.0	0.07	0.0	0.0	0.00	0.17	0.0	0.0	0.04	0.00	0.26	0.0											
29	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.09	0.00	0.32	0.09	0.01											
30	0.00	0.08	0.00	0.00	0.00	0.00	0.0	0.0	0.71	0.16	0.03	0.01											
31	0.00	0.01	0.0	0.06	0.0	0.00	0.00	0.00	0.02	0.00	0.00	0.00											
TOTAL	3.85	1.17	3.50	0.99	1.23	2.94	0.93	0.52	1.71	1.46	2.93	2.40											
STA AV																							

NOTES: Values are Thiessen weighted average amounts from 16 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1971 DAILY PRECIPITATION (inches)							REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.01	0.00	0.00	0.00	0.20	0.01	0.01	0.00	0.25	0.18	0.00
2	0.0	0.01	0.00	0.0	0.01	0.24	0.00	0.03	0.00	0.0	0.02	0.05
3	0.0	0.00	0.11	0.00	0.17	0.07	0.0	0.01	0.01	0.0	0.00	0.10
4	0.0	0.22	0.10	0.00	0.00	0.20	0.01	0.00	0.00	0.0	0.01	0.13
5	0.03	0.0	0.00	0.00	0.00	0.02	0.00	0.12	0.00	0.0	0.00	0.58
6	0.01	0.00	0.02	0.01	0.44	0.0	0.0	0.28	0.32	0.0	0.00	0.34
7	0.03	0.00	0.01	0.18	0.01	0.02	0.01	0.0	0.0	0.0	0.0	0.02
8	0.58	0.0	0.00	0.0	0.19	0.00	0.0	0.0	0.0	0.0	0.0	0.0
9	0.12	0.02	0.05	0.01	0.00	0.04	0.0	0.00	0.0	0.0	0.00	0.14
10	0.07	0.24	0.14	0.29	0.0	0.21	0.00	0.0	0.0	0.0	0.00	0.09
11	0.20	0.00	0.19	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.00	0.02
12	0.08	0.0	0.88	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.27	0.25
13	0.14	0.0	0.01	0.00	0.03	0.00	0.0	0.0	0.09	0.0	0.22	0.20
14	0.23	0.00	0.67	0.01	0.00	0.0	0.00	0.0	0.0	0.06	0.00	0.15
15	0.50	0.13	0.11	0.01	0.10	0.0	0.00	0.0	0.0	0.00	0.00	0.11
16	0.31	0.01	0.56	0.07	0.22	0.0	0.0	0.0	0.00	0.53	0.0	0.01
17	1.20	0.11	0.01	0.02	0.00	0.0	0.00	0.0	0.0	0.20	0.00	0.00
18	0.54	0.39	0.0	0.05	0.00	0.00	0.01	0.0	0.0	0.00	0.10	0.0
19	0.02	0.09	0.0	0.00	0.00	0.00	0.58	0.0	0.0	0.10	0.00	0.00
20	0.06	0.00	0.0	0.21	0.01	0.00	0.00	0.0	0.02	0.09	0.00	0.0
21	0.03	0.00	0.04	0.07	0.03	0.00	0.01	0.0	0.0	0.01	0.00	0.00
22	0.21	0.00	0.41	0.01	0.01	0.0	0.33	0.0	0.0	0.0	0.00	0.36
23	0.16	0.0	0.66	0.18	0.00	0.00	0.02	0.0	0.0	0.00	0.01	0.04
24	0.00	0.22	0.04	0.14	0.00	0.0	0.00	0.0	0.0	0.00	0.12	0.01
25	0.23	0.05	0.48	0.14	0.00	0.88	0.0	0.0	0.03	0.00	0.13	0.53
26	0.02	0.00	0.35	0.01	0.02	0.91	0.00	0.0	0.07	0.19	1.64	0.01
27	0.00	0.09	0.01	0.00	0.00	0.15	0.00	0.0	0.07	0.09	0.08	0.00
28	0.0	0.11	0.0	0.0	0.00	0.18	0.0	0.0	0.06	0.01	0.34	0.0
29	0.00	0.00	0.10	0.0	0.10	0.0	0.0	0.09	0.68	0.00	0.40	0.14
30	0.00	0.00	0.10	0.00	0.00	0.0	1.02	0.0	0.25	0.04	0.04	0.01
31	0.00	0.01	0.0	0.07	0.07	0.00	0.00	0.00	0.03	0.00	0.00	0.00
TOTAL	4.80	1.71	4.38	1.44	1.42	3.13	0.97	0.56	2.29	1.92	3.56	3.43
STA AV												

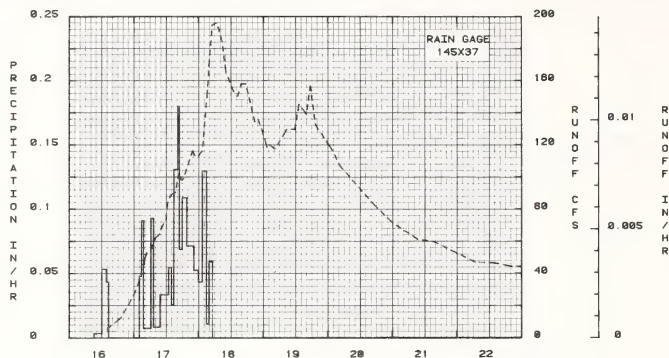
NOTES: Values are thissen weighted average amounts from 16 shielded recording gages. STA AV do not apply to shielded rain gage records.

1971 MEAN DAILY DISCHARGE (cfs)							REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.85	26.06	10.13	43.56	75.26	53.30	15.97	2.05	0.96	3.47	2.69	3.95
2	3.61	22.82	9.07	49.04	90.71	52.54	14.33	2.05	1.04	3.49	2.65	4.47
3	3.38	18.75	8.83	42.97	105.13	46.95	12.91	1.97	1.27	3.51	2.58	4.23
4	3.34	18.24	8.37	48.58	128.12	45.79	11.67	1.87	1.33	3.93	2.83	3.85
5	3.27	16.18	8.08	46.88	131.55	42.08	10.82	1.97	1.11	3.96	2.61	6.61
6	3.20	14.96	7.93	53.04	135.18	39.67	10.27	2.63	1.20	3.80	2.10	19.08
7	3.16	14.87	8.15	62.99	138.85	40.12	9.49	2.01	1.18	3.27	2.56	8.53
8	3.69	13.87	8.48	56.13	135.66	39.98	8.67	1.97	1.39	2.87	2.59	7.51
9	9.89	13.22	8.63	56.40	131.93	39.72	7.88	1.68	1.12	2.56	2.46	6.24
10	7.89	27.98	9.25	57.71	127.98	42.83	7.49	1.44	0.97	2.49	2.61	5.62
11	6.12	21.00	13.25	51.41	130.00	40.10	7.38	1.36	0.81	2.38	2.73	4.45
12	5.42	18.90	29.93	46.93	128.41	36.97	7.06	1.27	0.90	2.27	3.25	4.15
13	5.42	20.47	24.17	44.57	120.06	35.17	6.48	1.11	0.88	2.20	3.17	4.19
14	5.53	19.79	18.15	52.14	105.86	33.66	5.96	1.09	0.91	2.46	2.95	4.23
15	4.77	19.98	18.84	58.86	100.94	31.64	5.43	1.09	0.99	2.33	2.76	4.10
16	8.67	17.34	13.64	59.40	94.52	29.89	5.02	0.96	1.08	2.57	2.44	3.93
17	76.93	16.46	13.64	57.97	79.49	28.83	4.81	1.10	1.13	3.02	2.47	3.85
18	155.69	15.46	13.76	51.86	69.75	27.04	5.18	1.05	1.19	2.89	2.49	3.85
19	130.51	15.48	13.70	51.94	63.75	25.26	6.40	0.97	1.27	3.35	2.63	3.81
20	93.31	13.51	13.65	55.67	58.95	23.06	5.51	0.86	1.31	3.47	2.66	3.69
21	61.16	13.53	15.69	54.31	54.40	20.92	4.29	0.83	1.60	3.35	2.65	3.61
22	46.78	13.29	27.09	52.16	51.48	19.49	5.03	0.95	1.59	3.22	2.70	4.49
23	39.99	12.88	88.42	53.13	53.58	18.43	4.52	1.03	1.55	3.24	2.61	5.16
24	34.43	11.94	70.93	49.43	54.23	17.24	3.66	1.09	1.38	2.99	2.86	4.75
25	28.71	11.95	61.23	48.71	56.32	23.34	3.22	1.03	1.51	2.65	2.90	4.33
26	20.65	11.85	133.63	45.93	63.99	36.66	3.03	0.91	1.82	3.04	16.77	4.24
27	28.88	11.56	76.76	44.88	68.03	26.58	2.83	0.78	1.97	2.78	14.31	4.43
28	23.73	11.00	62.61	48.60	65.15	26.11	2.56	0.81	2.02	2.08	6.71	4.50
29	22.02		68.76	53.45	64.32	20.45	2.32	0.87	2.73	1.91	5.66	4.27
30	23.87		68.78	61.02	60.92	17.09	2.32	1.18	3.25	2.29	4.91	3.89
31	27.84		59.81		56.37		2.23	0.98		2.51		3.81
MEAN	29.023	16.534	31.653	52.054	90.337	32.703	6.605	1.318	1.402	2.915	3.844	5.091
100HR5	1.592	0.819	1.736	2.763	4.955	1.736	0.362	0.074	0.160	0.204	0.279	0.279
STA AV	0.949	0.569	0.818	1.683	3.493	1.553	0.244	0.042	0.032	0.082	0.175	0.223

NOTES: To convert CFS to IRI/DAT, multiply by 0.001769. STA AV amounts based on 1967-71 record period.

1971 SELECTED RUNOFF EVENT						REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 16 - 23, 1971											
1-16	RG 145X37 0.04	0.005	1-16	RG 145X37			1-16	1406	5.642	0.0	
				915	0.0	0.0		1656	9.453	0.0016	
				1204	0.0036	0.01		1924	12.979	0.0036	
				1345	0.0535	0.10		2202	20.902	0.0069	
				1840	0.0436	0.14		2400	26.915	0.0104	
			1-17	201	0.0	0.14					
WATERSHED CONDITIONS:											
Runoff event was caused by a											
sustained winter rain fol-											
lowing about 10 days of inter-											
mittent rain and snowmelt.											
				251	0.0480	0.18	1-17	180	33.488	0.0181	
				337	0.0913	0.25		356	48.194	0.0210	
				620	0.0074	0.27		448	53.113	0.0242	
				718	0.0531	0.36		620	55.040	0.0303	
				941	0.0084	0.38		746	61.800	0.0365	
				1258	0.0335	0.49		932	64.652	0.0447	
				1404	0.0545	0.55		1008	68.339	0.0476	
				1851	0.0255	0.57		1156	73.731	0.0570	
				1627	0.1312	0.78		1236	84.485	0.0609	
				1657	0.1800	0.87		1336	88.885	0.0673	
				1758	0.0689	0.94		1524	90.686	0.0792	
				1937	0.1091	1.12		1652	102.594	0.0897	
				2217	0.0712	1.31		1738	98.136	0.0958	
				2400	0.0524	1.40		1824	99.095	0.1010	
			1-18	123	0.0434	1.46		2010	108.009	0.1145	
				300	0.1299	1.67		2144	116.367	0.1275	
				356	0.0107	1.68		2242	113.184	0.1357	
				517	0.0593	1.76		2400	113.184	0.1465	
							1-18	126	116.367	0.1586	
								318	154.108	0.1772	
								354	170.131	0.1844	
								504	194.675	0.2001	
								638	196.188	0.2227	
								844	184.301	0.2521	
								1012	164.672	0.2710	
								1306	152.821	0.3049	
								1428	150.267	0.3202	
								1552	158.016	0.3361	
								1728	158.016	0.3547	
								2048	134.356	0.3906	
								2212	135.538	0.4045	
								2400	126.273	0.4215	
							1-19	126	118.522	0.4348	
								226	119.610	0.4436	
								424	117.441	0.4608	
								840	129.696	0.4997	
								1140	129.696	0.5284	
								1316	145.244	0.5446	
								1602	139.125	0.5736	
								1732	156.706	0.5900	
								1932	132.012	0.6113	
								2400	120.703	0.6529	
							1-20	148	116.367	0.6686	
								424	106.993	0.6900	
								1702	82.767	0.7784	
								2400	71.387	0.8180	
							1-21	926	61.101	0.8641	
								1524	59.717	0.8907	
								2400	52.481	0.9263	
							1-22	638	47.014	0.9506	
								1346	46.431	0.9752	
								2026	44.148	0.9975	
								2400	44.148	1.0091	
							1-23	400	42.486	1.0219	
								1140	39.288	1.0450	
								1538	39.809	1.0566	
								2400	35.764	1.0795	

NOTES: To convert CFS to I/R/HR, multiply by 0.00007372.



EVENT OF JANUARY 16 - 23, 1971  
RIMBOLDS, IDAHO TOLLGATE WATERSHED (116083)

## REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)

LOCATION: Owyhee County, Idaho; 35 miles south of Nampa, Idaho; an east-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 306.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	3.55	1.57	3.55	1.46	1.15	2.74	0.39	0.56	2.06	1.25	3.14	2.71	24.14										
Q	2.839	0.997	2.432	2.480	1.119	0.287	0.072	0.002	0.002	0.094	0.293	0.842	11.458										
STA AV P	4.42	1.59	2.04	1.75	1.36	2.62	0.94	1.03	1.76	2.62	2.33	22.92											
Q	1.853	0.772	1.094	1.466	0.847	0.264	0.054	0.002	0.001	0.027	0.144	0.372	6.897										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge				Maximum Volume for Selected Time Interval				Maximum Volume for Selected Time Interval				Maximum Volume for Selected Time Interval				Maximum Volume for Selected Time Interval				Maximum Volume for Selected Time Interval			
Date	Rate	1 Hour	2 Hours	Date	Vol.	6 Hours	12 Hours	Date	Vol.	1 Day	2 Days	Date	Vol.	8 Days	Vol.	Date	Vol.	14 Days	Vol.	Date	Vol.	30 Days	Vol.
1971	1-18	0.032	1-18	0.027	1-18	0.053	1-18	0.142	1-17	0.259	1-17	0.456	1-16	0.748	1-16	1.580							
MAXIMUMS FOR PERIOD OF RECORD																							
	1-27	0.060	1-21	0.050	1-20	0.096	1-20	0.261	1-20	0.445	1-20	0.720	1-20	1.050	1-19	1.734							
	1970	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969							

NOTES: Watershed conditions: Watershed is sagebrush rangeland used almost exclusively for cattle grazing. Willows are common along watercourses and in seep areas. Vegetation consists largely of big sagebrush, bitterbrush, Idaho fescue, Sandberg bluegrass, bluebunch wheatgrass, squirreltail grass, and snowberry. 10% of the area has a vegetative cover of 0-25%, 35% of the area has a vegetative cover of 26-50%, 20% of the area has a vegetative cover of 51-75%, and 35% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.11-6. Records started: Precipitation - 1961; Runoff - 1967. Precipitation: Thiessen weighted average (Computed Actual) amounts from 3 rain gages. Station average precipitation amounts based on 1968-71 record period. Station average runoff amounts based on 1967-71 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles N.E. of watershed.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.16	0.00	0.0	0.0	0.01	0.22	0.0											
2	0.0	0.01	0.00	0.0	0.0	0.48	0.0	0.00	0.0	0.0	0.0	0.05											
3	0.0	0.0	0.04	0.0	0.20	0.02	0.00	0.00	0.03	0.0	0.01	0.15											
4	0.0	0.05	0.09	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.05											
5	0.0	0.03	0.0	0.0	0.0	0.0	0.01	0.06	0.01	0.0	0.05	0.69											
6	0.00	0.0	0.0	0.01	0.61	0.0	0.0	0.14	0.24	0.0	0.0	0.27											
7	0.09	0.0	0.0	0.24	0.01	0.01	0.01	0.0	0.0	0.0	0.0	0.0											
8	1.01	0.0	0.0	0.0	0.03	0.01	0.0	0.0	0.0	0.0	0.0	0.19											
9	0.02	0.01	0.05	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14											
10	0.05	0.22	0.10	0.11	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.06											
11	0.17	0.0	0.09	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.00											
12	0.20	0.0	1.26	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.40											
13	0.05	0.0	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.07	0.24	0.08											
14	0.07	0.0	0.02	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.05											
15	0.04	0.35	0.02	0.05	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.01											
16	0.09	0.0	0.33	0.28	0.07	0.0	0.0	0.0	0.0	0.35	0.0	0.0											
17	0.90	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0											
18	0.26	0.23	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.00											
19	0.02	0.12	0.00	0.0	0.01	0.0	0.05	0.0	0.0	0.11	0.02	0.0											
20	0.17	0.0	0.18	0.00	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.0											
21	0.0	0.0	0.0	0.02	0.00	0.0	0.03	0.0	0.0	0.0	0.0	0.0											
22	0.04	0.0	0.35	0.01	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.26											
23	0.07	0.0	0.51	0.19	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.06											
24	0.00	0.05	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.09	0.02												
25	0.22	0.02	0.33	0.01	0.01	0.69	0.0	0.0	0.0	0.0	0.05	0.36											
26	0.01	0.0	0.16	0.01	0.05	0.76	0.0	0.0	0.25	0.17	1.43	0.03											
27	0.01	0.06	0.02	0.0	0.0	0.23	0.0	0.0	0.0	0.08	0.08	0.0											
28	0.10	0.21	0.0	0.0	0.0	0.19	0.0	0.0	0.05	0.0	0.0	0.0											
29	0.01	0.0	0.01	0.02	0.00	0.0	0.32	0.49	0.0	0.26	0.06												
30	0.0	0.06	0.0	0.01	0.0	0.0	0.01	0.99	0.25	0.05	0.0												
31	0.01	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.01												
TOTAL	3.55	1.57	3.55	1.46	1.15	2.74	0.39	0.56	2.06	1.25	3.14	2.71											
STA AV	4.42	1.59	2.04	1.75	1.36	2.62	0.94	1.03	1.76	2.62	2.33												

NOTES: Values are Thiessen weighted average 'Actual' amounts from 3 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by R. E. Hanson, "Computing Actual Precipitation", Proceedings of WRO-JUNE Symposium, Gellie, Norway, August, 1972. The equation used is:  $\text{Iose (U/S)} = \text{Iose (U/S)} \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 8 yrs (1968-71) record period. For temperature information, see table of daily maximum and minimum values included for watersheds 68.001 and 68.014.



1971 REAN DAILY DISCHARGE (cfs) REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.133	0.831	0.214	1.582	0.731	0.183	0.063	0.002	0.0	0.018	0.066	0.173
2	0.121	0.805	0.218	1.503	0.755	0.282	0.055	0.003	0.0	0.010	0.066	0.166
3	0.121	0.710	0.214	1.465	0.816	0.205	0.056	0.004	0.0	0.010	0.062	0.167
4	0.154	0.652	0.197	1.428	0.884	0.198	0.044	0.003	0.0	0.017	0.074	0.166
5	0.197	0.609	0.181	1.355	0.857	0.166	0.040	0.002	0.0	0.032	0.071	1.255
6	0.233	0.604	0.188	1.251	0.909	0.152	0.048	0.003	0.0	0.025	0.053	2.037
7	0.263	0.576	0.181	1.323	0.835	0.142	0.043	0.005	0.0	0.025	0.050	0.626
8	0.434	0.522	0.173	1.249	0.780	0.141	0.044	0.005	0.0	0.025	0.050	0.454
9	2.236	0.454	0.166	1.216	0.755	0.126	0.031	0.003	0.0	0.023	0.050	0.403
10	1.520	0.539	0.193	1.183	0.664	0.145	0.035	0.001	0.0	0.021	0.050	0.403
11	0.826	0.454	0.240	1.150	0.576	0.137	0.048	0.0	0.0	0.021	0.050	0.312
12	0.563	0.420	0.648	1.118	0.522	0.132	0.037	0.0	0.0	0.021	0.086	0.286
13	0.421	0.403	0.903	1.057	0.471	0.124	0.030	0.0	0.0	0.021	0.105	0.263
14	0.340	0.387	0.542	0.955	0.425	0.117	0.031	0.0	0.0	0.021	0.055	0.252
15	0.326	0.434	0.454	0.913	0.420	0.111	0.027	0.0	0.0	0.023	0.078	0.242
16	0.853	0.420	0.498	0.864	0.403	0.097	0.025	0.0	0.0	0.034	0.066	0.223
17	4.801	0.420	0.575	0.970	0.371	0.087	0.023	0.0	0.0	0.047	0.062	0.205
18	4.823	0.420	0.574	1.047	0.320	0.095	0.025	0.0	0.0	0.047	0.062	0.189
19	2.733	0.403	0.666	0.940	0.299	0.102	0.027	0.0	0.0	0.047	0.062	0.181
20	2.228	0.392	1.039	0.933	0.286	0.091	0.031	0.0	0.0	0.056	0.066	0.173
21	1.671	0.382	1.226	0.940	0.274	0.093	0.031	0.0	0.0	0.062	0.066	0.166
22	1.428	0.356	1.861	0.857	0.263	0.060	0.028	0.0	0.0	0.062	0.062	0.315
23	1.355	0.312	3.247	0.849	0.242	0.040	0.023	0.0	0.0	0.062	0.066	0.353
24	1.218	0.312	2.317	0.808	0.232	0.083	0.018	0.0	0.0	0.062	0.072	0.286
25	1.246	0.275	2.191	0.920	0.223	0.064	0.018	0.0	0.0	0.062	0.086	0.274
26	1.415	0.253	2.474	0.857	0.207	0.130	0.014	0.0	0.0	0.062	0.851	0.263
27	1.226	0.247	2.284	0.805	0.197	0.115	0.010	0.0	0.0	0.059	0.555	0.239
28	0.985	0.223	2.049	0.755	0.181	0.141	0.007	0.0	0.0	0.056	0.256	0.214
29	0.884		1.923	0.755	0.164	0.085	0.008	0.0	0.006	0.056	0.223	0.205
30	0.884		1.878	0.755	0.154	0.072	0.003	0.0	0.018	0.056	0.197	0.189
31	0.857		1.750		0.166		0.002	0.0		0.059		0.181
REAN	1.1774	0.4578	1.0084	1.0627	0.4641	0.1230	0.0299	0.0010	0.0008	0.0388	0.1253	0.3490
INCHES	2.839	0.997	2.432	2.480	1.119	0.287	0.072	0.002	0.002	0.094	0.293	0.842
STA AV	1.853	0.772	1.094	1.466	0.847	0.264	0.054	0.002	0.001	0.027	0.144	0.372

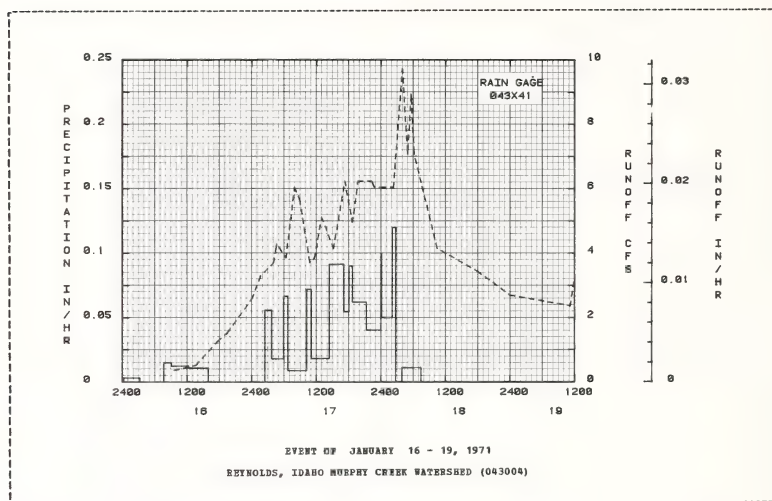
NOTES: To convert CFS to IN/DAY, multiply by 0.077783. STA AV based on 1968-71 record period.

1971 SELECTED RUNOFF EVENT REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)												
AMPRECEDENT CONDITIONS			RAINFALL									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Runoff	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(cfs)	(inches)	
EVENT OF JANUARY 16 - 19, 1971												
RG 043IX41			RG 043IX41									
1-16	C.O.	0.011	1-16	13	0.0	0.0	1-16	936	0.355	0.0		
				313	0.0033	0.01		1336	0.518	0.0057		
				782	0.0	0.01		1736	1.249	0.0172		
				902	0.0150	0.03		1930	1.542	0.0258		
				1217	0.0092	0.06		2400	2.576	0.0558		
WATERSHED CONDITIONS:												
Runoff event was caused by a sustained winter rain following about 10 days of intermittent rain and snowmelt.			1-17	1557	0.0109	0.10	1-17	140	3.297	0.0717		
				227	0.0	0.10		402	3.703	0.0985		
				342	0.0560	0.17		436	4.294	0.1058		
				557	0.0178	0.21		620	3.845	0.1287		
				642	0.0533	0.25		754	6.041	0.1538		
				1012	0.0086	0.28		852	5.660	0.1721		
				1102	0.0840	0.35		1044	3.703	0.2004		
				1422	0.0150	0.40		1138	3.845	0.2114		
				1706	0.0915	0.65		1258	5.118	0.2308		
				1801	0.0436	0.69		1508	4.141	0.2633		
				1941	0.1050	0.76		1716	6.238	0.2992		
				2116	0.0581	0.91		1800	4.946	0.3246		
				2400	0.0402	1.02		1944	6.238	0.3439		
			1-18	6	0.1001	1.03		2216	6.238	0.3951		
				206	0.0500	1.13		2246	6.041	0.4050		
				246	0.1350	1.22		2400	6.041	0.4291		
				351	0.0	1.22	1-18	216	6.041	0.4741		
				726	0.0084	1.25		356	9.726	0.5158		
								456	7.069	0.5430		
								534	8.945	0.5594		
								608	7.069	0.5741		
								1024	4.141	0.6516		
								1756	3.429	0.7440		
								2400	2.688	0.8041		
							1-19	1112	2.361	0.8957		

NOTES: To convert CFS to IN/HR, multiply by .003241

1971 SELECTED RUNOFF EVENT						REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 16 - 19, 1971 (CONTINUED)											
							1-19	1336	3.297	0.9177	
								2400	2.576	1.0167	

NOTES: To convert CFS to IN/HR, multiply by .003241



## REYNOLDS, IDAHO SUMMIT WATERSHED (048077)

LOCATION: Owyhee County, Idaho; 30 miles south of Hampa, Idaho, a west-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 205.00 acres

MONTHLY PRECIPITATION AND RUSOFF (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
P	1.07	0.35	2.06	0.43	0.99	2.20	0.05	0.67	1.76	0.95	1.10	1.46	13.09												
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
STA AV	1.93	0.49	0.88	0.59	0.85	1.68	0.09	1.12	0.62	0.89	1.09	1.00	11.18												
Q	0.002	0.0	0.0	0.0	0.0	0.014	0.0	0.017	0.0	0.0	0.0	0.0	0.033												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUSOFF (inches) FOR SELECTED TIME INTERVALS																									
Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Date		Date		Date		Date		Date	
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0.0
MAXIMUMS FOR PERIOD OF RECORD																									
6-19	0.258	6-19	0.059	6-19	0.059	6-19	0.070	6-20	0.070	6-20	0.070	6-19	0.070	8-9	0.083	1969	1969	1969	1969	1969	1969	1969	1969	1968	1968

NOTES: Watershed conditions: Sagebrush rangeland with almost exclusive cattle grazing in early spring and late fall. Numerous barren ridges. Vegetation consists largely of big sagebrush, cheatgrass, Sandberg bluegrass, bluebunch wheatgrass, and spiketail grass. 25% of the area has a vegetative cover of 0-25% and 75% of the area has a vegetative cover of 25-50%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.12-5. Records started: Precipitation - 1963; Runoff - 1967. Precipitation: \*Computed actual\* amounts from 1 rain gage. Station average precipitation amounts are based on 1968-71 period of record. Station average runoff amounts are based on 1967-71 period of record. No runoff occurred during 1971. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles N.E. of watershed.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.05	0.05	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.11	0.01	0.0	0.0	0.0	0.0	0.0	0.04													
4	0.0	0.0	0.02	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.05													
5	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.14													
6	0.02	0.0	0.0	0.0	0.61	0.0	0.0	0.95	0.23	0.0	0.0	0.12													
7	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.26													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11													
10	0.0	0.01	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07													
11	0.02	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.03	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16													
13	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.09	0.11													
14	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01													
15	0.02	0.0	0.01	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.05	0.0	0.83	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0													
17	0.68	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0													
18	0.20	0.11	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0													
19	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02													
21	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12													
23	0.0	0.0	0.13	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01													
24	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0													
25	0.0	0.0	0.07	0.0	0.0	0.04	0.0	0.0	0.01	0.0	0.02	0.22													
26	0.0	0.0	0.04	0.0	0.0	0.72	0.0	0.0	0.04	0.0	0.43	0.04													
27	0.0	0.0	0.01	0.0	0.0	0.19	0.0	0.0	0.0	0.15	0.03	0.0													
28	0.0	0.02	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.04	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.27	0.0	0.0	0.0													
30	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	1.21	0.19	0.12	0.02													
31	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	1.07	0.35	2.06	0.43	0.93	2.20	0.05	0.67	1.76	0.95	1.10	1.46													
STA AV	1.93	0.49	0.88	0.59	0.85	1.64	0.09	1.12	0.62	0.89	1.09	1.00													

NOTES: Values are 'actual' amounts from a pair of recording gages (shielded and unshielded) at Station 045161. 'Actual' amounts were computed as per relationship developed by W. R. Bason, "Computing Actual Precipitation", Proceedings of WMO-1945 Symposium, Guello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (0.75) \pm 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on a 4 yr (1968-71) record period. For temperature information, see table of daily maximum and minimum values included for 68.012.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.04	0.05	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.11	0.01	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	3	0.0	0.02	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.02	
4	0.0	0.0	0.0	0.02	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.05	5	0.0	0.01	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.05	
6	0.02	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.05	0.17	0.0	0.0	6	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
7	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.02	8	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.02	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
10	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
11	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	11	0.02	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	
12	0.03	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	12	0.03	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.01	
13	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.08	13	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.02	0.0	0.01	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	0.02	0.0	0.01	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	
16	0.05	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	16	0.05	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	
17	0.68	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	17	0.68	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	
18	0.19	0.05	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	18	0.19	0.05	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.07	
19	0.0	0.02	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	19	0.0	0.02	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.02	20	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.02	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	22	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	
23	0.0	0.0	0.31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	23	0.0	0.0	0.31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
24	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	24	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
25	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.20	25	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.20	
26	0.0	0.0	0.03	0.0	0.0	0.69	0.0	0.0	0.04	0.0	0.34	0.03	26	0.0	0.0	0.03	0.0	0.0	0.69	0.0	0.0	0.04	0.0	0.34	
27	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.02	0.04	0.0	27	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.02	0.04	0.0	
28	0.0	0.02	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.03	0.0	28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.25	0.0	0.04	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.25	0.0	0.04	0.0	
30	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	1.10	0.05	0.02	0.0	30	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	1.10	0.05	0.02	
31	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	1.06	0.19	1.33	0.24	0.88	2.02	0.05	0.64	1.57	0.59	0.89	0.57	TOTAL	1.06	0.19	1.33	0.24	0.88	2.02	0.05	0.64	1.57	0.59	0.89	0.57
STA AV													STA AV												

NOTES: Values are amounts from unshielded recording gage 049461. STA AV do not apply to unshielded rain gage records.

1971 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.05	0.05	0.0	1	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.05	0.05	0.0
2	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.03	3	0.0	0.0	0.0	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.03
4	0.0	0.0	0.02	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.03	4	0.0	0.0	0.02	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.03
5	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.11	5	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.11
6	0.02	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.05	0.20	0.0	0.0	6	0.02	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.05	0.20	0.0	0.0
7	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.11	8	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.11
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
10	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.03	10	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.03
11	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	11	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0
12	0.03	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.05	12	0.03	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.05	
13	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.08	13	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.05
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.02	0.0	0.01	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	15	0.02	0.0	0.01	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0
16	0.05	0.0	0.52	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0	16	0.05	0.0	0.52	0.02	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0
17	0.68	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	17	0.68	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0
18	0.20	0.08	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	18	0.20	0.08	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0
19	0.0	0.04	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	19	0.0	0.04	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	20	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
21	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	22	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12
23	0.0	0.0	0.32	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	23	0.0	0.0	0.32	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
24	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	25	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21
26	0.0	0.0	0.04	0.0	0.0	0.70	0.0	0.0	0.04	0.0	0.39	0.03	26	0.0	0.0	0.04	0.0	0.0	0.70	0.0	0.0	0.04	0.0	0.39	0.03
27	0.0	0.0	0.10	0.0	0.20	0.0	0.0	0.0	0.08	0.0	0.22	0.0	27	0.0	0.0	0.10	0.0	0.20	0.0	0.0	0.0	0.08	0.0	0.22	0.0
28	0.0	0.02	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.04	0.0	28	0.0	0.02	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.04	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.26	0.0	0.08	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.26	0.0	0.08	0.0
30	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.11	1.16	0.0	0.04	0.02	30	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.11	1.16	0.0	0.04	0.02
31	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.07	0.27	1.66	0.33	0.93	2.12	0.05	0.66	1.67	0.76	0.99	0.95													
STA AV																									

## REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)

LOCATION: Owyhee County, Idaho; 36 miles south of Nampa, north flowing tributary to the east fork of Reynolds Creek, Snake River Basin.

AREA: 100.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
	P	6.68	3.10	5.88	2.47	2.16	3.13	0.68	0.65	3.28	4.31	5.68	7.23	45.17															
1971	Q	1.657	0.935	0.809	3.041	17.101	5.557	0.701	0.133	0.085	0.318	0.225	0.239	30.800															
STA AV	P	8.65	3.13	3.26	2.63	1.67	2.39	0.47	1.37	1.25	3.03	4.84	6.69	39.36															
	Q	0.457	0.365	0.367	2.264	9.882	3.983	0.373	0.078	0.054	0.121	0.243	0.180	18.467															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
Maximum Discharge														Maximum Volume for Selected Time Interval															
Date		Date		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
Date		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.	
1971		5-4	0.057	5-7	0.055	5-7	0.109	5-7	0.308	5-7	0.540	5-7	0.893	5-6	1.741	5-4	6.698												
MAXIMUMS FOR PERIOD OF RECORD																													
	5-17	0.058	5-7	0.055	5-7	0.109	5-7	0.308	5-7	0.540	5-7	0.893	5-6	1.741	5-4	6.698													
1970			1971		1971		1971		1971		1971		1971		1971														

NOTES: Watershed conditions: Rangeland watershed with seasonal cattle and sheep grazing. Scrub aspen, willow, scattered Douglas fir, and sagebrush with natural mountain meadows. Vegetative cover varies with annual precipitation type of cover is 32% shrub and brush, 17% grass and forbes, and 9% rock and rock fragments. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1726, p. 68-13-14. Records started: Precipitation-1963; Runoff-1966. Precipitation: "Computed Actual" amounts from one rain gage. Station average precipitation values based on 1968-71 record period. Station average runoff values based on 1968-71 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles S.W. of watershed.

SNOW COURSE DATA: DATE OF MEASUREMENT/AVERAGE WATER CONTENT (INCHES)																									
Course#	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches													
166076	010871	13.60	011371	13.60	012771	18.60	021071	18.70	022471	20.50	032271	22.60													
176007	032671	25.50	040971	25.70	042171	26.40	043071	25.30	050571	18.60	051271	11.11													
176007	051871	5.20																							

NOTES: For snow course location information, see Hydrologic Data for Experimental Agricultural Watersheds in the United States 1968, USDA Misc. Pub. 1330, p. 68-001-6.

1971 DAILY AIR TEMPERATURE (degrees F)													REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min													
1	15 6	46 30	12 3	35 18	58 44	43 31	67 51	81 63	65 37	31 24	28 19	25 16													
2	7 2	31 15	20 4	38 26	59 47	47 31	59 43	77 62	52 34	39 27	30 17	22 19													
3	5 -2	19 8	28 20	40 19	55 37	52 32	58 36	79 59	50 34	47 36	42 30	21 16													
4	4 -2	26 16	20 8	47 27	49 37	49 37	64 45	78 61	64 39	58 42	40 21	22 19													
5	9 2	18 13	15 7	44 31	48 34	66 36	63 44	77 55	74 53	61 56	28 11	34 23													
6	16 6	22 16	25 18	49 34	45 32	63 40	57 41	73 53	62 40	63 49	41 11	32 11													
7	29 16	32 17	32 21	34 24	52 38	67 48	60 42	74 59	54 32	61 46	38 26	12 5													
8	30 26	38 25	30 18	40 23	46 36	59 38	69 50	78 62	66 44	62 49	38 26	26 7													
9	30 27	39 25	36 24	44 32	52 37	58 42	68 49	80 63	69 55	66 53	47 38	28 18													
10	29 22	44 31	33 23	37 17	55 38	49 37	60 33	78 61	74 56	67 54	48 34	20 16													
11	24 20	41 29	32 16	30 18	56 43	55 33	57 37	79 61	65 49	59 45	48 40	18 15													
12	20 4	49 32	33 21	34 18	59 43	66 42	64 42	81 63	69 51	58 38	43 27	20 16													
13	13 8	39 29	21 15	42 26	49 32	62 46	70 54	82 65	69 45	59 30	28 25	18 13													
14	23 12	42 28	25 14	58 35	53 30	67 36	72 54	77 59	54 33	32 23	23 19	22 16													
15	27 23	38 20	22 15	37 29	60 26	63 49	75 59	77 57	56 39	30 22	24 18	18 15													
16	36 27	28 16	23 12	41 27	30 20	62 45	78 63	74 59	46 32	27 21	27 17	25 18													
17	37 30	25 21	17 8	31 23	34 16	63 44	78 61	73 51	43 28	34 20	25 19	32 22													
18	40 36	29 20	25 9	29 21	46 25	56 45	75 65	72 55	59 30	30 21	22 17	23 16													
19	45 38	22 12	34 15	42 22	47 25	62 45	72 58	72 55	55 47	38 30	34 20	28 22													
20	38 15	21 14	37 23	40 26	34 22	69 50	73 61	74 55	49 36	40 25	35 30	29 24													
21	23 15	27 12	36 28	36 23	38 23	76 56	75 67	75 53	51 30	40 24	43 34	26 17													
22	22 11	30 18	37 29	42 22	49 31	75 55	69 53	68 58	58 39	49 38	33 28	36 30													
23	26 22	27 19	34 30	37 21	54 35	68 40	74 58	61 39	66 46	41 32	35 28	28 23													
24	26 19	32 15	31 26	28 19	62 40	67 49	75 60	70 46	60 41	32 24	36 27	36 25													
25	31 26	15 8	33 26	34 24	62 48	57 43	74 58	73 57	43 32	40 24	28 21	29 27													
26	41 30	13 5	36 21	35 25	61 43	45 37	74 57	76 59	35 27	35 28	34 25	36 27													
27	44 31	14 8	27 16	45 25	63 42	47 33	75 57	74 59	32 26	22 10	27 24	26 23													
28	41 31	9 4	38 19	46 31	53 38	64 40	76 61	75 56	37 26	12 11	30 25	25 12													
29	39 30		45 33	49 30	56 34	52 33	77 59	73 54	30 25	23 3	27 26	20 16													
30	41 34		42 19	55 35	42 31	61 43	79 65	72 50	28 25	26 20	39 20	20 16													
31	46 35		25 16		43 29		79 63	57 45		24 18		27 18													
AV.	28 19	29 18	29 18	40 25	51 34	59 41	70 53	75 56	55 38	42 30	34 25	26 18													
STATION	23.6	23.7	23.6	32.5	42.4	50.2	61.4	65.4	46.1	36.2	34.2	22.0													
STA AV	20 20	32 21	32 21	38 23	54 36	62 43	73 54	73 54	61 43	46 32	37 26	27 18													

NOTES: Temperature data are taken from hygrothermograph record at station 176114. STA AV based on 1966-71 record period.

1971 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.01	0.0	1.62	0.37	0.0
2	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.38	0.0	0.22	0.09	0.0	0.0	0.0	0.0	0.0	0.21
4	0.0	0.68	0.64	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.36
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	1.17
6	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.40	0.38	0.0	0.0	0.51
7	0.02	0.0	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	1.15	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.29
9	0.17	0.01	0.03	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.24
10	0.14	0.44	0.15	0.40	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.12
11	0.35	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07
12	0.11	0.0	1.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.60
13	0.11	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.13	0.13	0.46	0.60
14	0.19	0.0	0.13	0.02	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.48
15	0.33	0.04	0.09	0.0	0.27	0.0	0.0	0.0	0.0	0.01	0.0	0.30
16	0.38	0.03	0.56	0.01	0.26	0.0	0.0	0.0	0.0	0.84	0.0	0.06
17	1.94	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0
18	0.81	0.66	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0
19	0.04	0.13	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.09	0.02	0.0
20	0.07	0.0	0.0	0.33	0.05	0.0	0.0	0.0	0.0	0.08	0.0	0.0
21	0.0	0.0	0.02	0.28	0.15	0.0	0.0	0.0	0.0	0.02	0.0	0.0
22	0.32	0.0	0.61	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.70
23	0.25	0.0	0.51	0.55	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02
24	0.0	0.35	0.04	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0
25	0.28	0.15	0.43	0.26	0.0	1.05	0.0	0.0	0.02	0.0	0.18	0.89
26	0.02	0.0	0.51	0.0	0.0	0.79	0.0	0.0	0.12	0.22	2.00	0.0
27	0.0	0.18	0.0	0.0	0.0	0.15	0.0	0.0	0.22	0.23	0.57	0.0
28	0.0	0.30	0.0	0.0	0.0	0.18	0.0	0.0	0.04	0.0	0.97	0.0
29	0.0	0.0	0.05	0.18	0.0	0.0	0.13	0.13	0.0	0.02	0.47	0.0
30	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.19	0.76	0.06	0.0	0.0
31	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	6.68	3.10	5.88	2.47	2.16	3.13	0.64	0.65	3.28	4.31	5.64	7.23
STA AV	8.65	3.13	3.26	2.63	1.67	2.39	0.47	1.37	1.25	3.03	4.84	6.69

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) at Station 166194. 'Actual' amounts were computed as per relationship developed by W. E. Saxon, "Computing Actual Precipitation", Proceedings of WHO-IDHS Symposium, Gello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.92$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on a 4 yr (1968-71) record period.

1971 DAILY PRECIPITATION (inches) REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.01	0.0	0.37	0.16	0.0
2	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.01	0.0	0.0	0.0	0.04
3	0.0	0.0	0.03	0.0	0.21	0.08	0.0	0.0	0.0	0.0	0.0	0.08
4	0.0	0.19	0.05	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.17
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.58
6	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.38	0.35	0.0	0.0	0.25
7	0.01	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.57	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08
9	0.08	0.01	0.02	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.07
10	0.07	0.41	0.09	0.16	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.03
11	0.17	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
12	0.05	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.19
13	0.09	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.07	0.20	0.17
14	0.16	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.14
15	0.27	0.04	0.06	0.0	0.17	0.0	0.0	0.0	0.0	0.01	0.0	0.08
16	0.35	0.03	0.34	0.01	0.16	0.0	0.0	0.0	0.0	0.48	0.0	0.0
17	1.93	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0
18	0.80	0.17	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0
19	0.03	0.03	0.0	0.0	0.0	0.12	0.0	0.07	0.0	0.0	0.15	0.0
20	0.06	0.0	0.0	0.12	0.01	0.0	0.0	0.0	0.0	0.06	0.0	0.0
21	0.0	0.0	0.01	0.07	0.03	0.0	0.0	0.0	0.0	0.02	0.0	0.0
22	0.25	0.0	0.56	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.33
23	0.20	0.0	0.90	0.16	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.01
24	0.0	0.10	0.04	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0
25	0.23	0.04	0.43	0.08	0.0	0.98	0.0	0.01	0.0	0.0	0.10	0.38
26	0.01	0.0	0.30	0.0	0.0	0.73	0.0	0.0	0.09	0.17	1.36	0.0
27	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.16	0.10	0.35	0.0
28	0.0	0.01	0.0	0.0	0.0	0.16	0.0	0.0	0.02	0.0	0.73	0.0
29	0.0	0.0	0.02	0.0	0.08	0.0	0.0	0.07	0.66	0.0	0.22	0.12
30	0.04	0.0	0.04	0.0	0.0	0.0	0.0	0.60	0.33	0.06	0.0	0.0
31	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	5.33	1.06	3.72	0.82	1.62	2.82	0.62	0.56	1.89	1.86	3.57	2.73
STA AV												

NOTES: Values are amounts from unshielded recording gage 166494. STA AV do not apply to unshielded rain gage records.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.01	0.0	0.08	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10
2	0.0	0.0	0.0	0.13	0.0	0.21	0.09	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17
3	0.0	0.19	0.21	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89
5	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.39	0.37	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39
6	0.02	0.0	0.0	0.0	0.24	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.08	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19
8	0.01	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15
9	0.10	0.0	0.83	0.11	0.27	0.0	0.22	0.0	0.0	0.0	0.0	0.08	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08
10	0.26	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08
11	0.08	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38
12	0.10	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.10	0.35	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39
13	0.16	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41
14	0.31	0.04	0.08	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19
15	0.37	0.03	0.05	0.01	0.20	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
16	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	1.93	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.82	0.39	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.03	0.08	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.07	0.0	0.0	0.23	0.03	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.01	0.19	0.07	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.28	0.0	0.59	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51
23	0.23	0.0	0.91	0.37	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
24	0.0	0.0	0.23	0.04	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21
25	0.26	0.10	0.43	0.17	0.0	0.0	1.04	0.0	0.0	0.0	0.15	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.65
26	0.01	0.0	0.40	0.0	0.0	0.0	0.78	0.0	0.0	0.11	0.19	1.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.08	0.0	0.0	0.16	0.0	0.0	0.19	0.16	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.15	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.04	0.0	0.0	0.11	0.0	0.0	0.10	0.97	0.0	0.22	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26
30	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.88	0.53	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL												6.02	TOTAL												5.02
STA AV												2.01	STA AV												1.86

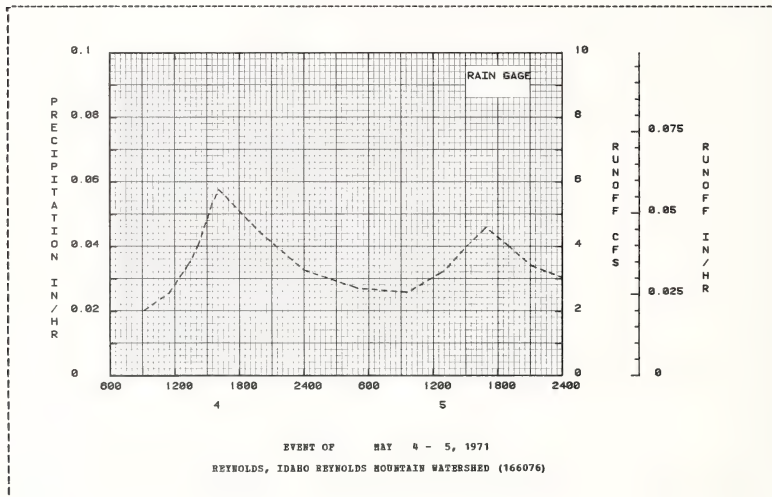
NOTES: Values are amounts from shielded recording gage 166594. STA AV do not apply to shielded rain gage records.

1971 MEAN DAILY DISCHARGE (cfs)													REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.039	0.156	0.103	0.146	1.873	1.088	0.286	0.027	0.008	0.013	0.035	0.034	1	0.039	0.156	0.103	0.146	1.873	1.088	0.286	0.027	0.008	0.013	0.035	0.034
2	0.039	0.150	0.101	0.137	2.356	1.080	0.264	0.029	0.010	0.017	0.035	0.035	2	0.039	0.150	0.101	0.137	2.356	1.080	0.264	0.029	0.010	0.017	0.035	0.035
3	0.039	0.142	0.093	0.133	2.516	0.950	0.229	0.022	0.011	0.022	0.035	0.035	3	0.039	0.142	0.093	0.133	2.516	0.950	0.229	0.022	0.011	0.022	0.035	0.035
4	0.039	0.137	0.085	0.144	3.405	0.989	0.190	0.023	0.010	0.043	0.035	0.036	4	0.039	0.137	0.085	0.144	3.405	0.989	0.190	0.023	0.010	0.043	0.035	0.036
5	0.039	0.132	0.086	0.203	3.275	0.942	0.161	0.024	0.007	0.070	0.032	0.036	5	0.039	0.132	0.086	0.203	3.275	0.942	0.161	0.024	0.007	0.070	0.032	0.036
6	0.041	0.128	0.085	0.327	3.368	0.949	0.154	0.040	0.018	0.082	0.031	0.034	6	0.041	0.128	0.085	0.327	3.368	0.949	0.154	0.040	0.018	0.082	0.031	0.034
7	0.040	0.123	0.084	0.396	3.743	1.039	0.134	0.027	0.012	0.075	0.031	0.034	7	0.040	0.123	0.084	0.396	3.743	1.039	0.134	0.027	0.012	0.075	0.031	0.034
8	0.036	0.120	0.084	0.279	3.442	1.067	0.123	0.023	0.010	0.063	0.030	0.034	8	0.036	0.120	0.084	0.279	3.442	1.067	0.123	0.023	0.010	0.063	0.030	0.034
9	0.033	0.119	0.085	0.308	3.540	1.005	0.110	0.019	0.009	0.058	0.030	0.034	9	0.033	0.119	0.085	0.308	3.540	1.005	0.110	0.019	0.009	0.058	0.030	0.034
10	0.030	0.193	0.086	0.371	3.494	1.046	0.103	0.020	0.009	0.051	0.033	0.034	10	0.030	0.193	0.086	0.371	3.494	1.046	0.103	0.020	0.009	0.051	0.033	0.034
11	0.031	0.213	0.085	0.281	3.653	0.977	0.098	0.027	0.008	0.047	0.035	0.034	11	0.031	0.213	0.085	0.281	3.653	0.977	0.098	0.027	0.008	0.047	0.035	0.034
12	0.034	0.181	0.084	0.245	3.570	0.931	0.088	0.028	0.009	0.040	0.033	0.034	12	0.034	0.181	0.084	0.245	3.570	0.931	0.088	0.028	0.009	0.040	0.033	0.034
13	0.034	0.174	0.083	0.224	3.157	0.941	0.078	0.026	0.009	0.036	0.032	0.034	13	0.034	0.174	0.083	0.224	3.157	0.941	0.078	0.026	0.009	0.036	0.032	0.034
14	0.034	0.164	0.082	0.340	2.804	0.840	0.072	0.028	0.007	0.037	0.032	0.034	14	0.034	0.164	0.082	0.340	2.804	0.840	0.072	0.028	0.007	0.037	0.032	0.034
15	0.034	0.154	0.081	0.572	2.859	0.790	0.067	0.027	0.010	0.033	0.031	0.034	15	0.034	0.154	0.081	0.572	2.859	0.790	0.067	0.027	0.010	0.033	0.031	0.034
16	0.034	0.147	0.081	0.592	2.291	0.738	0.063	0.019	0.011	0.027	0.031	0.034	16	0.034	0.147	0.081	0.592	2.291	0.738	0.063	0.019	0.011	0.027	0.031	0.034
17	0.074	0.141	0.079	0.518	1.781	0.672	0.063	0.014	0.012	0.029	0.031	0.034	17	0.074	0.141	0.079	0.518	1.781	0.672	0.063	0.014	0.012	0.029	0.031	0.034
18	0.084	0.138	0.078	0.397	1.578	0.647	0.061	0.014	0.013	0.033	0.030	0.034	18	0.084	0.138	0.078	0.397	1.578	0.647	0.061	0.014	0.013	0.033	0.030	0.034
19	0.453	0.137	0.076	0.409	1.861	0.652	0.065	0.012	0.011	0.034	0.031	0.034	19	0.453	0.137	0.076	0.409	1.861	0.652	0.065	0.012	0.011	0.034	0.031	0.034
20	1.047	0.131	0.072	0.614	1.225	0.593	0.059	0.010	0.015	0.039	0.031	0.034	20	1.047	0.131	0.072	0.614	1.225	0.593	0.059	0.010	0.015	0.039	0.031	0.034
21	0.528	0.127	0.071	0.536	1.060	0.598	0.053	0.010	0.014	0.042	0.031	0.034	21	0.528	0.127	0.071	0.536	1.060	0.598	0.053	0.010	0.014	0.042	0.031	0.034
22	0.365	0.124	0.074	0.537	1.221	0.563	0.038	0.010	0.013	0.060	0.030	0.031	22	0.365	0.124	0.074	0.537	1.221	0.563	0.038	0.010	0.013	0.060	0.030	0.031
23	0.296	0.121	0.070	0.500	1.386	0.515	0.061	0.010	0.012	0.059	0.027	0.028	23	0.296	0.121	0.070	0.500	1.386	0.515	0.061	0.010	0.012	0.059	0.027	0.028
24	0.250	0.119	0.210	0.467	1.361	0.458	0.048	0.008	0.012	0.053	0.027	0.028	24	0.250	0.119	0.210	0.467	1.361	0.458	0.048	0.008	0.012	0.053	0.027	0.028
25	0.215	0.116	0.161	0.416	1.562	0.475	0.042	0.007	0.013	0.045	0.029	0.028	25	0.215	0.116	0.161	0.416	1.562	0.475	0.042	0.007	0.013	0.045	0.029	0.028
26	0.193	0.116	0.181	0.388	1.951	0.487	0.038	0.008	0.017	0.047	0.028	0.027	26	0.193	0.116	0.181	0.388	1.951	0.487	0.038	0.008	0.017	0.047	0.028	0.027
27	0.111	0.127	0.181	0.370	1.976	0.486	0.037	0.020	0.017	0.027	0.027	0.028	27	0.111	0.127	0.181	0.370	1.976	0.486	0.037	0.020	0.017	0.027	0.027	0.028
28	0.174	0.106	0.154	0.666	1.647	0.493	0.033	0.008	0.020	0.036	0.032	0.027	28	0.174	0.106	0.154	0.666	1.647	0.493	0.033	0.008	0.020	0.036	0.032	0.027
29	0.164	0.139	0.086	0.666	1.605	0.378	0.030	0.011	0.013	0.036	0.034	0.028	29	0.164	0.139	0.086	0.666	1.605	0.378	0.030	0.011	0.013	0.036	0.034	0.028
30	0.158	0.165	0.165	1.184	1.443	0.325	0.030	0.009	0.014	0.036	0.034	0.028	30	0.158	0.165	0.165	1.184	1.443	0.325	0.030	0.009	0.014	0.036	0.034	0.028
31	0.156	0.165	0.165	1.239	1.239	0.277	0.027	0.008	0.008	0.036	0.039	0.028	31	0.156	0.165	0.165	1.239	1.239	0.277	0.027	0.008	0.008	0.036	0.039	0.028
MEAN	0.2245	0.1403	0.1096	0.4259	2.3176	0.7782	0.0950	0.0180	0.0119	0.0331	0.0316	0.0324	MEAN	0.2245	0.1403	0.1096	0.4259	2.3176	0.7782	0.0950	0.0180	0.0119	0.0331	0.0316	0.0324
10% EXCEEDS	0.535	0.327	0.325	0.701	0.970	0.567	0.070	0.018	0.018	0.038	0.0225	0.029	10% EXCEEDS	0.535	0.327	0.325	0.701	0.970	0.567	0.070	0.018	0.018	0.038	0.0225	0.029
STA A4	0.445	0.365	0.467	2.264	0.848	0.373	0.078	0.054	0.121	0.043	0.043	0.041	STA A4	0.445	0.365	0.467	2.264	0.848	0.373	0.078	0.054	0.121	0.043	0.043	0.041

1971 SELECTED RUNOFF EVENT						REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 4 - 5, 1971											
RG											
5- 5	0.0		5- 5	2400	0.0	0.0	5- 4	910	2.081	0.0	
5- 4		0.226						1130	2.588	0.0535	
								1325	3.540	0.1117	
								1410	4.036	0.1399	
								1530	5.348	0.2020	
								1605	5.766	0.2341	
								1950	4.869	0.4244	
								2400	3.269	0.5083	
							5- 5	500	2.712	0.7326	
								935	2.584	0.8530	

WATERSHED CONDITIONS:  
For Watershed W-13(166076)  
runoff event occurred as the  
result of warmer temperatures  
and winds. This is a strictly  
snowmelt event with no  
precipitation.

NOTES: To convert CFS to IN/HR, multiply by 0.009917.



## REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)

LOCATION: Owyhee County, Idaho; 40 miles south of Nampa, Idaho; a tributary to Reynolds Creek, a tributary to the Snake River.

AREA: 33.00 acres

MONTHLY PRECIPITATION AND RUFOFF (inches)														REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)																			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																				
1971 P	1.79	0.83	2.85	1.27	0.82	2.37	0.59	0.39	2.53	1.38	1.54	2.21	18.57																				
Q	0.164	0.009	0.138	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.314																				
STA AV	2.50	0.72	1.34	0.99	0.96	1.60	0.34	0.86	0.93	1.07	1.58	1.40	14.25																				
Q	0.111	0.009	0.120	0.006	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.001	0.249																				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUFOFF (inches) FOR SELECTED TIME INTERVALS																																	
Maximum Discharge														Maximum Volume for Selected Time Interval																			
Date		Rate		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Date		Vol.		Date		Vol.		Date		Vol.					
1971		3-12		0.006		3-12		0.005		3-12		0.009		1-17		0.022		1-17		0.042		1-17		0.066		1-16		0.110		1-16		0.148	
MAXIMUMS FOR PERIOD OF RECORD																																	
1-21		0.042		1-21		0.029		1-21		0.048		1-21		0.065		1-20		0.106		1-20		0.160		1-20		0.192		1-19		0.229			
1967				1967				1967				1967				1969				1969				1969				1969					

NOTES: Watershed conditions: Watershed is entirely sagebrush rangeland used almost exclusively for cattle grazing. Vegetation consists of bluebunch wheatgrass, Sandberg bluegrass, cheatgrass, yarrow, and little sagebrush. 90% of the area has a vegetative cover of 0-25% and 10% of the area has a vegetative cover of 26-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Risc. Pub. 1262, p. 68.014-6. Records began: Precipitation-1963; Rufoff-1967. Precipitation: \*Computed actual\* amounts from one rain gage. Station average precipitation amounts are based on 1968-71 record period. Station average rufoff amounts are based on 1967-71 record period. For long-term precipitation records, see National Weather Service records at Boise, Idaho, 50 miles N.E. of watershed.

1971 DAILY AIR TEMPERATURE (degrees F)													REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	min	min	min	min	min	min	min	min	min	min	min	min		min	min	min	min	min	min	min	min	min	min	min	
1	19	9	46	34	24	11	46	29	72	50	48	39	78	57	94	71	78	46	44	34	34	28	28	20	
2	14	5	35	20	34	17	51	34	71	54	52	37	70	54	89	75	60	45	52	40	37	25	29	21	
3	14	1	28	14	42	28	48	28	68	46	58	42	68	45	92	69	62	44	59	47	45	30	26	20	
4	11	3	31	18	28	19	52	35	60	46	57	45	76	53	90	73	72	48	67	52	48	26	27	23	
5	14	3	26	14	26	17	58	41	57	43	66	48	75	53	87	65	84	58	70	54	31	19	39	27	
6	21	8	27	12	35	17	63	41	56	41	71	50	68	50	87	63	72	49	71	58	36	23	37	15	
7	34	20	36	18	44	23	46	33	62	44	77	59	71	47	86	68	61	70	55	46	26	16	8		
8	35	32	37	27	41	27	53	31	58	48	65	47	82	65	91	69	76	50	71	54	46	30	31	10	
9	36	33	42	28	46	32	60	45	62	49	67	53	82	57	92	72	86	62	71	58	49	38	33	22	
10	35	29	55	36	45	31	47	24	63	49	60	48	66	46	91	71	88	63	73	61	56	48	25	20	
11	32	24	48	32	43	35	44	31	66	46	66	42	66	47	91	66	75	67	59	66	51	43	22	19	
12	26	12	54	41	43	30	45	27	68	52	75	54	74	52	93	72	78	57	63	49	48	35	25	20	
13	18	13	51	38	33	25	56	37	58	42	74	57	79	65	96	76	77	60	71	46	36	32	22	17	
14	29	16	52	36	37	25	63	45	69	36	65	48	83	63	85	71	65	41	46	36	32	26	27	20	
15	34	26	46	30	33	23	50	33	69	33	72	51	91	68	90	73	65	45	40	31	32	27	22	19	
16	42	31	38	26	31	20	54	33	41	29	70	52	91	73	83	68	58	42	36	33	25	32	30	22	
17	41	30	34	29	27	17	41	32	46	27	69	59	89	73	84	65	55	40	43	29	34	24	37	26	
18	45	37	40	28	33	17	43	29	54	30	68	53	82	72	82	64	59	38	42	32	30	24	28	20	
19	51	42	29	21	40	21	56	30	58	34	72	55	79	64	90	66	70	45	44	40	41	30	33	26	
20	32	19	33	22	42	32	53	34	42	30	81	60	80	65	86	68	60	46	47	36	40	33	34	28	
21	27	16	39	23	48	39	47	31	50	33	88	61	87	65	83	64	60	39	44	34	38	29	35	32	
22	23	14	33	25	49	37	52	34	60	39	89	63	83	60	81	68	64	46	57	44	40	31	41	35	
23	31	24	36	26	44	41	30	63	41	82	60	85	65	70	74	75	54	48	34	43	33	33	27		
24	33	25	44	26	45	35	34	29	69	51	82	57	89	67	78	54	70	41	32	43	33	41	30		
25	36	31	27	19	35	47	31	72	54	69	50	89	85	66	83	65	54	41	47	29	34	28	34	28	
26	48	35	26	15	50	31	47	34	71	50	54	47	85	66	88	66	49	38	48	32	39	29	41	31	
27	44	37	26	17	49	26	54	34	73	51	57	44	81	66	86	70	46	36	42	30	32	31	27		
28	45	35	19	13	46	28	59	42	61	48	57	42	87	69	84	68	52	36	22	15	35	29	30	16	
29	47	36			58	42	40	61	65	42	62	41	89	71	84	63	40	34	30	12	32	30	24	20	
30	48	41			53	28	65	48	52	39	71	50	91	73	82	59	37	34	24	31	21	24	20		
31	51	40			41	25		52	36				90	72	70	51			28	25			32	22	
STA	33	23	37	25	40	27	51	34	61	42	68	51	81	62	86	66	65	46	51	39	39	29	30	22	
AV	30.8	20.1	30.3	20.7	32.7	24.7	37.7	25.4	47.7	35.3	58.4	39.3	68.6	54.3	75.7	64.2	67.6	49.7	54.2	44.2	44.2	34.2	34.2	22.2	
STA AV	33	23	39	27	42	28	47	30	60	40	67	49	81	60	80	59	66	48	51	36	41	29	32	21	

NOTES: Temperature data taken from hygrothermograph record at station 127149. STA AV based on 5 yr (1967-71) record period.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.12	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.16	0.08	0.0	0.02	0.08	0.0	0.0	0.02											
4	0.0	0.03	0.04	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.02	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.25											
6	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.17	0.27	0.0	0.0	0.16											
7	0.02	0.0	0.0	0.15	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.02	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.13											
10	0.0	0.05	0.05	0.27	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.23	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.09	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.28											
13	0.15	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.04	0.02	0.24											
14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.20											
15	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.06	0.03	0.90	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.76	0.0											
17	0.75	0.17	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0											
18	0.22	0.25	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.0											
19	0.02	0.10	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.13	0.0	0.0											
20	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0											
21	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.15	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31											
23	0.0	0.0	0.35	0.27	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.03											
24	0.18	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0											
25	0.0	0.0	0.25	0.18	0.0	0.32	0.0	0.0	0.0	0.0	0.02	0.40											
26	0.0	0.0	0.35	0.0	0.0	0.04	0.0	0.0	0.06	0.05	0.94	0.02											
27	0.0	0.02	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.04	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.06	0.20	0.0	0.0	0.06	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.50	0.0	0.0	0.0											
30	0.0	0.0	0.04	0.0	0.04	0.0	0.0	1.56	0.17	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	1.79	0.63	2.95	1.27	0.82	2.37	0.59	0.39	2.53	1.36	1.54	2.21											
STA AV	2.50	0.72	1.34	0.99	0.96	1.60	0.34	0.86	0.93	1.07	1.58	1.40											

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) 127407. 'Actual' amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WHO-IDBS Symposium, Gello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \pm 1.80$ , where  $U$  = unshielded catchment,  $S$  = shielded catchment, and  $A$  = actual amount of precipitation. STA AV values are based on 4 yr (1968-71) record period.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.03	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.13	0.06	0.0	0.02	0.08	0.0	0.0	0.01											
4	0.0	0.03	0.04	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.17											
6	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.15	0.26	0.0	0.0	0.10											
7	0.01	0.0	0.0	0.06	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01											
9	0.01	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01											
10	0.0	0.05	0.05	0.05	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.14	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.05	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01											
13	0.09	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.03	0.02	0.01											
14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0											
15	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.06	0.0	0.33	0.0	0.02	0.0	0.0	0.0	0.0	0.67	0.0	0.0											
17	0.72	0.06	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0											
18	0.21	0.07	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.0											
19	0.02	0.03	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.12	0.0	0.0											
20	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0											
21	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.11	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.25											
23	0.0	0.0	0.26	0.17	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02											
24	0.0	0.06	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0											
25	0.0	0.0	0.18	0.11	0.0	0.30	0.0	0.0	0.0	0.0	0.03	0.33											
26	0.0	0.0	0.10	0.0	0.0	0.79	0.0	0.0	0.06	0.05	0.55	0.01											
27	0.0	0.02	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.05	0.19	0.0	0.0	0.03	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.29	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.04	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	1.47	0.32	1.73	0.66	0.65	2.18	0.55	0.32	1.63	1.08	0.96	0.94											
STA AV																							

NOTES: Values are amounts from unshielded recording gage 127407. STA AV do not apply to unshielded rain gage records.

1971 DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.14	0.07	0.0	0.02	0.08	0.0	0.0											
3	0.0	0.03	0.04	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.02											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.16	0.27	0.0	0.0											
7	0.01	0.0	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.01	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.05	0.05	0.13	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0											
11	0.19	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.07	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19											
13	0.12	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.04	0.03											
14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0											
15	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.06	0.02	0.58	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.72	0.0											
17	0.74	0.18	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0											
18	0.22	0.16	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.08	0.0											
19	0.02	0.07	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.13	0.0	0.0											
20	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0											
21	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.14	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.32	0.22	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.10	0.0	0.09	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.22	0.15	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.02											
26	0.0	0.0	0.19	0.0	0.0	0.82	0.0	0.0	0.06	0.05	0.74	0.01											
27	0.0	0.02	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.02	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.05	0.20	0.0	0.0	0.04	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.39	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	1.23	0.09	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	1.64	0.59	2.26	0.93	0.73	2.29	0.57	0.37	2.07	1.23	1.24	1.45											
STA AV																							

NOTES: Values are amounts from shielded recording gage 127507. STA AV do not apply to shielded rain gage records.

1971 MEAN DAILY DISCHARGE (cfs)												REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.003	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.001	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0 T	0.001	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.002	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.001	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.001	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.012	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.083	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.066	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.026	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.009	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.002	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.001	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.003	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.004	0.001	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.002	0.0 T	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.004	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.002	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.001	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.002	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.003	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.004	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0073	0.0005	0.0062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001											
INCHES	0.164	0.009	0.138	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003											
STA AV	0.111	0.009	0.120	0.006	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.001											

NOTES: To convert CFS to IN/DAY, multiply by 0.721262. STA AV based on 5 yr (1967-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

LOCATION: Washita River above Anadarko, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Caddo, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION—NW 1/4 sec. 15, T. 7 N., R. 10 W., lat. 35 deg. 05 min., long. 98 deg. 14 min.; North edge of Anadarko, Okla., 35 feet upstream from U.S. Highway 281 bridge over Washita River; at river mile 305.2, approximately 8.1 miles upstream from confluence of Sugar Creek.

AREA: 2339800.00 acres 3656.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA				WATERSHED 100 AT ANADARKO													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971 Q	0.016	0.016	0.016	0.005	0.003	0.031	0.041	0.016	0.092	0.058	0.056	0.061	0.411																		
Q	0.041	0.039	0.045	0.055	0.133	0.133	0.053	0.041	0.102	0.084	0.087	0.050	0.863																		
ANNUAL MAXIMUM DISCHARGE (in/cu) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge				1 Hour				2 Hours				Maximum Volume for Selected Time Interval																			
Date		Rate		Date		Vol.		Date		Vol.		Date		Vol.																	
Date		Rate		Date		Vol.		Date		Vol.		Date		Vol.																	
1971	10-31	0.001	10-31	0.001	10-31	0.002	10-31	0.005	10-31	0.010	10-31	0.020	10-31	0.033	9-20	0.058															
MAXIMUMS FOR PERIOD OF RECORD																															
9-22		0.004		9-23		0.004		9-23		0.009		9-23		0.026		9-23		0.052		9-23		0.100		5-23		0.188		9-23		0.384	
1965				1965				1965				1965				1965				1965				1965				1965			

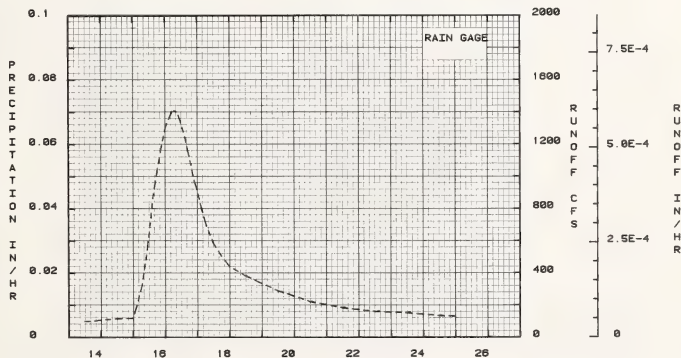
NOTES: Watershed conditions not applicable. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 697-721. Since this is the inflow station to a study reach, precipitation data are not applicable. Runoff records began Oct. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971												CHICKASHA, OKLAHOMA		WATERSHED 100 AT ANADARKO	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	36.1	55.4	72.1	33.8	12.0	297.7	12.8	72.1	100.6	171.0	1600.5	70.4			
2	37.8	54.9	79.5	30.0	11.2	239.8	205.6	60.8	67.2	137.1	682.7	75.5			
3	48.0	52.5	76.0	25.4	11.1	52.2	1198.2	47.1	45.0	121.3	375.0	77.9			
4	49.7	54.4	67.7	24.9	11.1	32.0	596.9	38.7	34.1	961.3	282.8	78.2			
5	49.0	52.3	59.9	25.9	11.1	29.6	715.1	28.1	31.7	587.5	245.4	78.0			
6	45.0	53.2	55.6	25.7	10.5	49.5	203.9	21.2	39.4	240.7	197.6	84.4			
7	48.1	52.5	53.2	23.4	9.9	39.0	108.3	16.7	284.9	164.5	161.7	87.6			
8	42.8	46.8	50.4	20.1	9.9	23.7	75.9	19.7	307.7	127.8	143.7	91.2			
9	43.1	45.7	51.1	17.7	10.4	21.8	57.6	22.0	156.6	107.9	129.0	90.3			
10	47.8	52.3	49.9	15.6	10.5	49.6	43.8	21.3	119.2	94.6	115.8	91.5			
11	61.0	53.0	49.7	14.0	10.4	288.5	36.9	15.8	110.9	83.1	107.2	90.0			
12	60.6	50.9	50.2	14.4	9.8	358.5	26.9	15.3	99.7	73.9	99.5	89.7			
13	55.2	54.6	53.2	13.8	9.2	388.9	21.3	16.8	91.2	68.2	93.0	90.9			
14	58.8	55.8	54.9	13.9	8.8	394.7	17.6	162.6	70.0	62.7	91.5	100.5			
15	60.8	58.3	53.4	13.8	9.7	278.4	13.1	127.9	49.3	56.6	87.3	116.2			
16	59.1	55.8	51.5	12.6	9.8	124.1	11.6	89.7	39.2	55.6	83.3	664.0			
17	56.1	55.6	49.9	11.8	9.8	82.4	9.3	73.2	41.1	56.1	82.1	1249.7			
18	57.3	57.1	49.7	11.2	9.7	61.3	7.3	144.8	53.3	58.0	78.5	622.4			
19	58.8	57.1	49.0	11.1	9.2	43.1	5.8	64.5	309.8	52.7	75.7	384.0			
20	57.1	56.3	45.0	10.6	8.5	36.8	5.1	48.0	1054.3	50.4	72.2	291.9			
21	54.4	60.8	43.9	10.5	7.4	28.0	4.7	38.8	836.3	52.6	71.9	224.6			
22	56.6	62.9	41.4	10.5	6.8	22.6	5.0	34.9	313.1	71.2	73.5	183.9			
23	55.4	62.1	40.9	10.6	6.7	21.9	5.0	26.0	198.6	95.0	73.8	160.7			
24	53.7	63.5	40.9	11.1	6.3	31.2	4.6	24.0	155.7	79.6	73.8	148.6			
25	52.7	55.4	40.7	11.6	6.2	30.2	75.9	25.9	435.6	66.3	74.1	133.3			
26	49.0	56.8	39.7	14.3	6.2	19.9	88.0	26.9	1477.3	60.4	76.0	126.1			
27	51.3	58.1	40.9	15.2	6.3	15.4	78.0	24.2	1335.2	60.7	77.9	120.5			
28	53.2	63.7	42.2	13.6	6.7	12.1	78.0	18.7	616.9	57.8	77.6	115.4			
29	53.7	63.9	43.8	13.8	6.8	10.7	122.1	17.6	355.3	57.3	73.8	112.4			
30	55.1	38.7	38.7	13.6	6.6	11.3	86.1	41.3	243.2	147.4	70.1	109.7			
31	55.4	34.0	27.0				77.1	227.3		1582.3		53.9			
MEAN	52.21	55.63	50.53	16.47	9.53	100.49	128.82	52.00	301.75	182.57	184.90	194.02			
INCHES	0.016	0.016	0.016	0.005	0.003	0.031	0.041	0.016	0.092	0.058	0.056	0.061			
STA AV	0.041	0.039	0.045	0.055	0.133	0.133	0.053	0.041	0.102	0.084	0.087	0.050			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69-007) of this publication. To convert discharge in cfs to in/day, multiply by 0.00001017. To convert discharge in inches to AC-FT, multiply by 194,983. STA AV based on 11 yr (1961-71) record period.

1971 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF DECEMBER 14 - 25, 1971											
12-14		0.001	12-14	1200			1200	99.470	0.0		
				2400			2400	108.620	0.0005		
			12-15	1200			1200	117.770	0.0011		
				2400			2400	120.510	0.0017		
			12-16	306			306	201.250	0.0019		
WATERSHED CONDITIONS: Not applicable.				706			706	336.990	0.0024		
				1106			1106	566.060	0.0032		
				1506			1506	867.338	0.0044		
				1630			1630	948.238	0.0049		
				1806			1806	1022.800	0.0056		
				1930			1930	1091.288	0.0062		
				2106			2106	1165.049	0.0070		
				2400			2400	1290.049	0.0085		
			12-17	136			136	1329.928	0.0094		
				306			306	1357.698	0.0103		
				536			536	1407.678	0.0118		
				706			706	1410.329	0.0127		
				836			836	1402.378	0.0136		
				1006			1006	1380.398	0.0145		
				1200			1200	1333.668	0.0156		
				1506			1506	1282.808	0.0173		
				1806			1806	1129.029	0.0188		
				2106			2106	1006.519	0.0202		
				2211			2211	966.428	0.0207		
				2400			2400	919.518	0.0214		
			12-18	306			306	807.598	0.0225		
				706			706	692.708	0.0238		
				1206			1206	586.298	0.0252		
				1806			1806	505.110	0.0266		
				2400			2400	440.740	0.0278		
			12-19	1200			1200	380.330	0.0299		
				2400			2400	334.620	0.0317		
			12-20	1200			1200	288.908	0.0333		
				2400			2400	254.970	0.0347		
			12-21	1200			1200	221.030	0.0359		
				2400			2400	201.475	0.0370		
			12-22	1200			1200	181.920	0.0380		
				2400			2400	170.460	0.0389		
			12-23	1200			1200	159.000	0.0397		
				2400			2400	154.325	0.0405		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000008239. No precipitation record is shown because all of the watershed lies outside of the area in which precipitation is measured.



EVENT OF DECEMBER 14 - 25, 1971  
CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

## CHICKASAW, OKLAHOMA WATERSHED 200 AT VERDEN

LOCATION: Washita River above Verden, Okla.; Southwest Central Okla. and Texas Panhandle; in Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River; Red River Basin. GAGING STATION-SW1/8 sec. 7, T. 7 N., R. 8 W., lat. 35 deg. 05 min., long. 98 deg. 05 min.; North edge of Verden, Okla. at county road bridge over Washita River; at river mile 283.4, approximately 8.4 miles upstream from confluence with Iosine Creek.

AREA: 2612500.00 acres 4082.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASAW, OKLAHOMA WATERSHED 200 AT VERDEN														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
P	0.99	1.34	0.03	0.54	4.03	3.79	2.29	4.19	4.52	3.41	0.72	2.42	28.27															
Q	0.016	0.014	0.016	0.005	0.003	0.038	0.037	0.015	0.079	0.049	0.059	0.059	0.390															
STA AV	P	0.60	0.97	1.33	2.62	3.76	3.57	1.83	2.81	4.66	1.68	1.67	1.06	26.56														
	Q	0.045	0.041	0.045	0.055	0.128	0.134	0.050	0.037	0.096	0.083	0.085	0.052	0.852														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
Maximum Discharge														Maximum Volume for Selected Time Interval														
Date Date														Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.														
1971	11-1	0.001	11-1	0.001	11-1	0.001	11-1	0.004	11-1	0.008	10-31	0.016	10-31	0.027	9-20	0.050												
MAXIMUMS FOR PERIOD OF RECORD																												
5-6 0.002 5-7 0.002 9-24 0.005 9-24 0.014 9-24 0.028 9-23 0.055 9-23 0.108 9-21e 0.340																												
1969 1969 1965 1965 1965 1965 1965 1965																												

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a revised 1971 survey, (p. 69.007-1, this publication); sowed crop - 26%; row crop - 4%; alfalfa - 9%; pasture and range - 48%; and miscellaneous - 13%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Precipitation data obtained from a Thiessen weighted average of 66 rain gages for the reach between stations at Anadarko and Verden. Precipitation records began Oct. 1961; runoff records began Sept. 1961. For long-time precipitation records, see National Weather Service records, at Chickasaw, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASAW, OKLAHOMA WATERSHED 200 AT VERDEN												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.08	0.0	0.54	0.0	0.0	0.0	0.01	0.05													
2	0.81	0.0	0.03	0.0	0.0	0.18	0.03	0.0	0.0	1.07	0.0	0.49													
3	0.58	0.0	0.0	0.0	0.01	0.57	0.0	0.0	0.0	0.0	0.0	0.15													
4	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.07	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.01	0.14	0.0	1.04	0.0	0.01	0.01	0.12													
9	0.0	0.0	0.0	0.0	0.53	0.69	0.0	0.0	0.01	0.0	0.0	0.05													
10	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.01	0.0	0.0	0.0	0.07													
11	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.02	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.06	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.04	0.0	0.0	0.0	1.16													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.01													
16	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.03	0.0	1.44	0.02	0.04	0.0												
18	0.0	0.30	0.0	0.0	0.06	0.0	0.0	0.0	0.96	0.59	0.0	0.0													
19	0.0	0.0	0.0	0.26	0.0	0.0	0.01	0.0	0.01	0.23	0.0	0.0													
20	0.0	0.0	0.0	0.01	0.0	0.33	0.0	0.0	0.0	0.04	0.0	0.0													
21	0.0	1.00	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.01	0.0	0.0	0.20	0.0	0.0	0.0	0.54	0.0													
23	0.0	0.0	0.0	0.0	0.37	0.0	0.42	0.01	0.13	0.0	0.05	0.0													
24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	1.89	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.11	0.79	0.0	0.0	0.0	0.86	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.02	0.0	0.02	0.0	0.0	0.95	0.11	0.0	0.02	0.0	0.0													
29	0.0	0.0	0.04	0.0	0.0	0.11	0.55	0.0	0.0	0.0	0.0	0.23													
30	0.0	0.0	0.0	0.0	0.36	0.22	0.0	0.0	0.0	0.11	0.07	0.0													
31	0.0	0.0	0.0	0.0	1.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.99	1.34	0.03	0.54	4.03	3.79	2.29	4.19	4.52	3.41	0.72	2.42													
STA AV	0.60	0.97	1.33	2.62	3.76	3.57	1.83	2.81	4.66	1.68	1.67	1.06													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 66 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

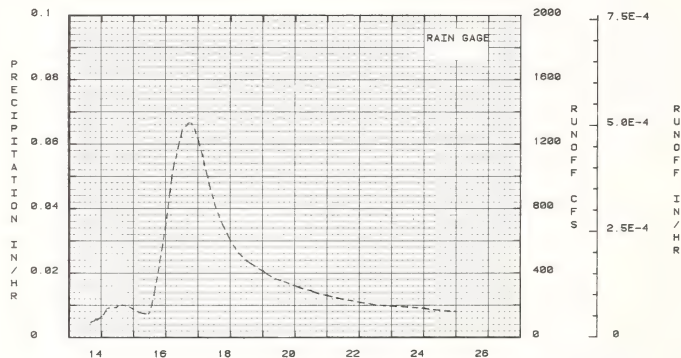
1971 MEAN DAILY DISCHARGE (cfs)												CHICKASHA, OKLAHOMA		WATERSHED 200 AT VERDEN	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	47.6	53.2	66.5	30.4	12.7	526.2	15.6	76.8	161.9	221.4	1776.1	75.6			
2	46.6	53.9	77.7	27.6	10.6	329.5	20.2	57.6	102.1	206.1	263.0	78.6			
3	56.1	53.6	85.6	26.6	8.5	169.0	908.7	48.7	59.8	299.9	494.0	85.8			
4	60.9	51.1	84.3	24.6	8.0	103.7	733.4	36.6	46.5	479.4	348.1	89.1			
5	48.3	51.8	78.6	23.9	7.6	64.2	896.1	29.8	36.9	881.4	284.1	89.0			
6	44.9	51.1	78.1	24.4	7.3	46.0	374.7	23.1	29.3	329.5	240.6	90.7			
7	44.7	52.9	70.3	24.8	7.3	60.6	145.4	19.2	50.6	222.4	201.0	92.2			
8	44.7	49.1	67.6	23.6	7.8	44.7	103.3	32.1	37.2	160.7	162.4	95.4			
9	45.8	47.0	63.6	21.0	11.3	110.7	73.8	30.0	203.7	141.0	147.8	99.3			
10	55.7	49.6	61.4	19.0	16.2	107.8	58.1	24.3	130.4	120.6	138.5	99.2			
11	77.6	52.6	60.2	18.1	13.0	200.5	46.3	21.1	107.1	104.9	124.4	94.6			
12	73.1	51.9	59.1	15.8	10.6	402.1	35.0	17.3	102.2	92.5	112.1	92.3			
13	68.9	50.0	60.9	13.6	9.2	323.7	25.4	16.6	92.0	88.1	102.6	92.6			
14	61.3	54.4	60.9	12.3	9.0	437.4	19.4	75.9	81.3	81.1	97.5	98.9			
15	64.0	56.7	58.7	11.4	9.0	396.3	16.6	212.3	58.1	78.9	92.3	184.5			
16	67.0	58.5	57.5	11.3	8.9	222.0	11.4	135.0	43.1	76.8	89.8	284.2			
17	64.2	55.6	55.5	13.5	8.2	126.9	8.8	84.4	40.7	74.9	88.6	1175.3			
18	62.0	56.4	53.0	13.3	7.0	81.2	7.4	112.3	59.5	73.6	87.4	864.1			
19	63.4	60.9	54.3	11.7	6.1	57.9	8.9	110.4	88.4	71.1	85.3	486.2			
20	61.5	59.4	53.2	12.6	6.0	42.4	3.9	59.9	689.5	65.1	83.1	359.8			
21	59.8	63.0	51.9	13.6	6.0	57.3	3.3	47.3	973.4	61.0	80.5	278.3			
22	55.7	69.9	48.4	14.4	6.4	36.8	2.3	40.7	486.3	58.4	81.7	218.2			
23	55.6	66.0	43.0	12.8	8.7	26.8	7.7	34.5	257.1	98.6	86.1	203.2			
24	55.8	65.5	41.6	11.7	9.0	23.9	9.6	27.0	216.5	108.0	83.3	187.1			
25	56.1	66.3	41.6	10.7	6.6	30.5	8.9	24.2	243.8	84.6	80.3	167.4			
26	53.2	59.4	42.2	9.0	6.1	29.4	75.1	24.4	938.9	71.9	79.2	152.3			
27	51.0	61.1	42.3	11.4	6.6	23.6	84.9	24.6	1393.0	90.3	79.9	143.7			
28	52.2	63.2	42.0	14.1	8.6	19.2	85.2	22.6	900.3	76.2	80.1	138.1			
29	53.7	40.0	40.0	12.9	6.7	14.7	82.6	23.8	443.0	70.3	80.5	133.6			
30	53.2	37.7	10.9	6.7	12.9	124.0	27.2	377.2	80.2	80.2	77.9	132.3			
31	53.1	35.1	35.1		42.4		68.4	115.0		728.1		64.5			
MEAN	56.70	56.57	57.06	16.69	9.62	137.40	130.95	52.72	290.82	174.25	217.60	207.94			
INCHES	0.016	0.014	0.016	0.005	0.003	0.038	0.037	0.015	0.079	0.049	0.059	0.059			
STA AV	0.045	0.041	0.045	0.055	0.128	0.134	0.050	0.037	0.096	0.083	0.085	0.052			

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000009111. To convert discharge in inches to AC-FY, multiply by 217,708. STA AV based on 11 yr (1961-71) record period.

1971 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA				WATERSHED 200 AT VERDEN			
PRECIPITATION CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)
EVENT OF DECEMBER 14 - 25, 1971										
12-14										
0.001										
12-14										
1600										
93.100										
0.0										
1711										
101.400										
0.0										
1818										
101.600										
0.0										
1900										
111.500										
0.0										
1948										
114.200										
0.0001										
2100										
113.000										
0.0001										
2200										
117.300										
0.0001										
2400										
132.600										
0.0002										
12-15										
130										
144.800										
0.0003										
330										
172.800										
0.0004										
430										
181.800										
0.0005										
600										
185.500										
0.0006										
1030										
187.100										
0.0009										
1230										
197.800										
0.0010										
1500										
378.100										
0.0012										
1800										
198.400										
0.0014										
2100										
189.100										
0.0016										
2400										
174.400										
0.0018										
800										
155.000										
0.0021										
12-16										
900										
145.900										
0.0024										
1100										
147.900										
0.0025										
1200										
159.600										
0.0026										
1330										
202.600										
0.0027										
1530										
286.300										
0.0029										
1730										
378.100										
0.0032										
1930										
479.198										
0.0035										
2130										
581.698										
0.0039										
2400										
713.100										
0.0045										
12-17										
130										
809.999										
0.0049										
300										
526.099										
0.0054										

1971	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF DECEMBER 14 - 25, 1971 (CONTINUED)										
							12-17	430	1011.898	0.0060
								600	1088.799	0.0066
								711	1111.898	0.0071
								900	1189.100	0.0079
								1200	1290.500	0.0093
								1500	1318.300	0.0108
								1700	1334.598	0.0118
								1830	1330.398	0.0126
								1930	1320.099	0.0131
								2100	1295.498	0.0138
							12-18	2400	1217.898	0.0152
								300	1125.100	0.0165
								600	1015.799	0.0177
								900	920.500	0.0186
								1300	803.198	0.0201
								1800	699.398	0.0215
								2400	598.100	0.0230
							12-19	600	522.800	0.0243
								1200	474.198	0.0254
								1800	443.300	0.0264
								2400	410.800	0.0274
							12-20	600	375.300	0.0283
								930	362.398	0.0288
								1300	355.000	0.0293
								1600	345.398	0.0297
								2400	319.698	0.0307
							12-21	600	301.800	0.0314
								1200	289.500	0.0321
								1800	270.799	0.0327
								2400	260.000	0.0333
							12-22	1200	236.200	0.0344
								2400	218.200	0.0354
							12-23	1200	200.200	0.0364
								2400	194.250	0.0373
							12-24	1200	188.300	0.0382
								2400	177.450	0.0390
								1200	166.600	0.0398
								2400	159.000	0.0405

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003796. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF DECEMBER 14 - 25, 1971  
CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN

## CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA

LOCATION: Washita River Watershed above Chickasha, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Carter, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--SE1/4 sec. 23, T. 7 N., R. 7 W., lat. 35 deg. 05 min.; long. 97 deg. 54 min., 1 mile northeast of Chickasha, Okla., at H.E. Bailey Turnpike bridge over Washita River; at river mile 256.5, approximately 1.3 miles downstream from confluence of Line Creek.

AREA: 2768000.00 acres 4325.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA																															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																																
1971	P	0.91	1.67	0.05	0.73	4.68	5.13	2.55	3.17	4.49	3.88	0.61	2.63	30.50																															
	Q	0.015	0.015	0.015	0.004	0.005	0.077	0.032	0.016	0.077	0.061	0.062	0.059	0.439																															
STA AV	P	0.71	1.11	1.37	2.81	3.71	3.30	1.77	2.91	3.95	1.73	1.91	0.99	26.28																															
	Q	0.036	0.033	0.039	0.061	0.141	0.097	0.043	0.037	0.080	0.075	0.069	0.046	0.757																															
ANNUAL MAXIMUM DISCHARGE (1a/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																													
Maximum Discharge														Maximum Volume for Selected Time Interval																															
Date		Rate		1 Hour		Date		Vol.		2 Hours		Date		Vol.		6 Hours		Date		Vol.		12 Hours		Date		Vol.		1 Day		Date		Vol.		2 Days		Date		Vol.		8 Days		Date		Vol.	
1971	10- 3	0.001	10- 3	0.001	10- 3	0.001	10- 3	0.002	10- 2	0.006	10- 2	0.011	10- 2	0.017	11- 1	0.024	9-26	0.056																											
MAXIMUMS FOR PERIOD OF RECORD																																													
4-12		0.003		5-29		0.002		4-12		0.005		4-12		0.015		5- 7		0.029		5- 6		0.055		5- 6		0.102		5- 5		0.329		1967		1969		1969		1969							

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a revised 1971 survey (p. 69,007-1, this publication); sowed crop - 36%; row crop - 2%; alfalfa - 7%; pasture and range - 44%; and miscel-laneous - 11%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69,7-21, (Composite). The station at Chickasha (4th St.) Watershed 400 was discontinued in 1967, therefore, causing a new Thiessen weighted average for this watershed. Precipitation data obtained from a Thiessen weighted average of 42 gages for the reach between Verden (200) and Chickasha (500). Precipitation records began Oct. 1961; runoff records began Jan. 1964. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.02	0.0	0.33	0.0	0.0	0.0	0.02	0.04													
2	0.12	0.0	0.04	0.0	0.0	0.62	0.0	0.0	0.0	2.17	0.0	0.49													
3	0.79	0.0	0.0	0.0	0.02	0.75	0.0	0.0	0.0	0.01	0.0	0.08													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.01	0.0	0.0	0.0													
7	0.0	0.01	0.0	0.0	0.0	1.06	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	1.06	0.0	0.02	0.01	0.38													
9	0.0	0.0	0.0	0.0	0.68	0.44	0.0	0.0	0.0	0.0	0.0	0.10													
10	0.0	0.0	0.0	0.0	0.01	0.41	0.0	0.0	0.0	0.0	0.0	0.12													
11	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.06	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.22	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.42	0.0	0.0	0.0	1.05													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.01													
16	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.11	0.03	0.06	0.0													
18	0.0	0.48	0.0	0.0	0.08	0.0	0.0	0.0	1.13	0.45	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.03	0.0	0.47	0.0	0.0	0.0	0.08	0.0	0.0													
21	0.0	1.12	0.0	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.01	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.44													
23	0.0	0.0	0.0	0.0	0.48	0.0	1.13	0.0	0.24	0.0	0.03	0.0													
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	1.95	0.0	0.0	0.0													
25	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.20	1.29	0.0	0.0	0.0	0.0	0.59	0.0	0.0													
27	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.01	0.0	0.05	0.0	0.0	0.94	0.07	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.02	0.01	0.0	0.01	0.24	0.0	0.11	0.0	0.26													
30	0.0	0.0	0.0	0.0	0.31	0.08	0.0	0.0	0.0	0.03	0.05	0.0													
31	0.0	0.0	0.0	0.0	1.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.91	1.67	0.05	0.73	4.68	5.13	2.55	3.17	4.49	3.88	0.61	2.63													
STA AV	0.71	1.11	1.37	2.81	3.71	3.30	1.77	2.91	3.95	1.73	1.91	0.99													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69,007) of this publication. Daily precipitation values Thiessen weighted average of 42 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

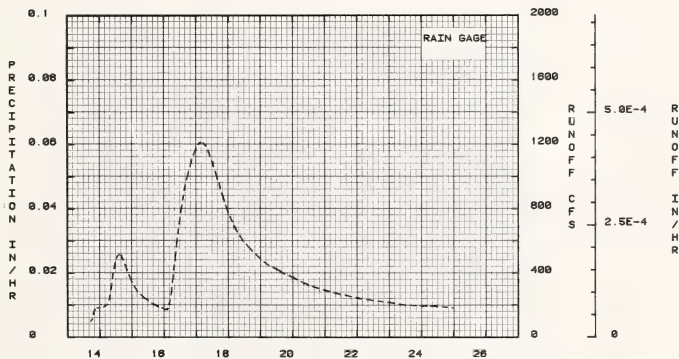
1971 MEAN DAILY DISCHARGE (cfs)													CHICKASAW, OKLAHOMA WATERSHED 500 BEAR CHICKASAW																						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec										
1	50.8	53.4	66.4	38.4	10.9	928.7	16.9	60.8	138.0	279.0	1829.7	88.7	1	50.8	53.4	66.4	38.4	10.9	928.7	16.9	60.8	138.0	279.0	1829.7	88.7										
2	52.3	54.7	69.2	35.8	11.4	373.2	17.4	72.0	128.3	466.0	1415.8	86.7	2	52.3	54.7	69.2	35.8	11.4	373.2	17.4	72.0	128.3	466.0	1415.8	86.7										
3	57.0	56.3	80.1	29.5	12.1	1763.6	212.4	58.5	88.0	1785.0	680.1	94.3	3	57.0	56.3	80.1	29.5	12.1	1763.6	212.4	58.5	88.0	1785.0	680.1	94.3										
4	72.5	56.9	88.7	23.1	8.5	379.5	952.1	52.1	52.5	382.8	420.9	95.8	4	72.5	56.9	88.7	23.1	8.5	379.5	952.1	52.1	52.5	382.8	420.9	95.8										
5	57.6	55.8	88.9	20.4	7.4	118.9	667.6	39.3	38.1	826.4	307.2	97.4	5	57.6	55.8	88.9	20.4	7.4	118.9	667.6	39.3	38.1	826.4	307.2	97.4										
6	49.8	54.9	75.9	17.8	6.2	80.8	651.2	33.3	33.0	557.2	259.0	96.8	6	49.8	54.9	75.9	17.8	6.2	80.8	651.2	33.3	33.0	557.2	259.0	96.8										
7	40.8	50.8	69.4	17.8	4.7	64.6	247.7	27.9	25.8	292.8	217.2	96.7	7	40.8	50.8	69.4	17.8	4.7	64.6	247.7	27.9	25.8	292.8	217.2	96.7										
8	41.5	47.2	66.6	19.8	3.4	1185.7	131.3	72.3	94.5	211.1	187.5	111.3	8	41.5	47.2	66.6	19.8	3.4	1185.7	131.3	72.3	94.5	211.1	187.5	111.3										
9	42.2	46.7	62.7	17.8	16.3	210.4	95.2	68.9	301.4	168.9	165.5	112.7	9	42.2	46.7	62.7	17.8	16.3	210.4	95.2	68.9	301.4	168.9	165.5	112.7										
10	46.7	48.9	59.7	16.4	10.9	212.4	67.8	42.6	170.5	145.4	150.5	112.4	10	46.7	48.9	59.7	16.4	10.9	212.4	67.8	42.6	170.5	145.4	150.5	112.4										
11	48.7	61.4	56.8	13.5	12.6	234.1	55.6	30.0	120.5	126.9	137.9	107.8	11	48.7	61.4	56.8	13.5	12.6	234.1	55.6	30.0	120.5	126.9	137.9	107.8										
12	57.6	59.4	56.1	13.5	12.2	360.7	40.9	23.7	100.4	111.1	125.0	100.4	12	57.6	59.4	56.1	13.5	12.2	360.7	40.9	23.7	100.4	111.1	125.0	100.4										
13	68.4	57.0	54.5	11.0	10.0	439.1	29.7	32.3	90.1	98.5	116.8	101.3	13	68.4	57.0	54.5	11.0	10.0	439.1	29.7	32.3	90.1	98.5	116.8	101.3										
14	70.4	54.7	56.3	6.7	6.7	357.8	23.5	39.4	80.9	90.3	110.0	118.4	14	70.4	54.7	56.3	6.7	6.7	357.8	23.5	39.4	80.9	90.3	110.0	118.4										
15	65.1	56.9	57.5	5.6	5.6	415.1	13.3	210.2	74.6	84.4	105.7	361.5	15	65.1	56.9	57.5	5.6	5.6	415.1	13.3	210.2	74.6	84.4	105.7	361.5										
16	68.5	58.1	54.9	6.6	4.2	330.3	10.6	237.5	55.6	78.2	100.3	238.6	16	68.5	58.1	54.9	6.6	4.2	330.3	10.6	237.5	55.6	78.2	100.3	238.6										
17	70.7	58.9	52.7	9.5	4.0	169.3	7.6	135.7	59.2	73.8	96.1	686.2	17	70.7	58.9	52.7	9.5	4.0	169.3	7.6	135.7	59.2	73.8	96.1	686.2										
18	66.9	74.0	48.6	11.2	3.9	109.8	2.7	85.7	95.1	74.4	95.1	1055.2	18	66.9	74.0	48.6	11.2	3.9	109.8	2.7	85.7	95.1	74.4	95.1	1055.2										
19	62.6	65.7	46.8	11.9	1.9	79.7	1.2	122.4	70.9	81.5	92.3	606.1	19	62.6	65.7	46.8	11.9	1.9	79.7	1.2	122.4	70.9	81.5	92.3	606.1										
20	63.9	65.5	50.0	12.2	1.2	65.0	0.9	98.1	207.9	102.6	89.8	424.8	20	63.9	65.5	50.0	12.2	1.2	65.0	0.9	98.1	207.9	102.6	89.8	424.8										
21	64.5	109.8	50.0	9.2	0.7	581.7	0.9	62.2	850.7	78.8	87.2	328.4	21	64.5	109.8	50.0	9.2	0.7	581.7	0.9	62.2	850.7	78.8	87.2	328.4										
22	64.8	105.8	49.9	10.3	1.1	211.1	1.0	47.4	747.6	69.7	88.2	267.2	22	64.8	105.8	49.9	10.3	1.1	211.1	1.0	47.4	747.6	69.7	88.2	267.2										
23	59.1	84.5	45.5	12.2	7.2	68.7	3.7	40.1	359.4	67.1	91.6	228.6	23	59.1	84.5	45.5	12.2	7.2	68.7	3.7	40.1	359.4	67.1	91.6	228.6										
24	58.1	73.6	42.4	12.5	1.6	40.8	38.8	36.4	395.7	100.5	91.6	202.2	24	58.1	73.6	42.4	12.5	1.6	40.8	38.8	36.4	395.7	100.5	91.6	202.2										
25	57.9	75.1	40.9	10.6	1.3	33.5	13.8	29.3	548.4	108.2	88.0	189.7	25	57.9	75.1	40.9	10.6	1.3	33.5	13.8	29.3	548.4	108.2	88.0	189.7										
26	56.6	74.6	41.0	10.5	3.5	33.2	5.0	28.7	507.4	99.2	85.8	174.1	26	56.6	74.6	41.0	10.5	3.5	33.2	5.0	28.7	507.4	99.2	85.8	174.1										
27	55.9	64.8	42.4	14.9	260.0	32.4	48.4	22.5	1231.2	105.8	85.4	161.2	27	55.9	64.8	42.4	14.9	260.0	32.4	48.4	22.5	1231.2	105.8	85.4	161.2										
28	53.0	66.3	40.9	14.4	60.2	26.9	95.9	24.4	1205.0	110.2	84.6	150.6	28	53.0	66.3	40.9	14.4	60.2	26.9	95.9	24.4	1205.0	110.2	84.6	150.6										
29	53.8	40.0	40.0	11.4	19.1	22.1	88.8	26.1	682.5	92.3	84.6	144.4	29	53.8	40.0	40.0	11.4	19.1	22.1	88.8	26.1	682.5	92.3	84.6	144.4										
30	54.5	39.2	11.3	15.9	18.9	77.5	28.2	403.4	84.9	85.3	144.1	30	54.5	39.2	11.3	15.9	18.9	77.5	28.2	403.4	84.9	85.3	144.1	30	54.5	39.2	11.3	15.9	18.9	77.5	28.2	403.4	84.9	85.3	144.1
31	53.9	38.2		46.6		103.7	27.3		154.9		70.9		31	53.9	38.2		46.6		103.7	27.3		154.9		70.9											
MEAN	57.67	63.99	55.75	15.19	18.42	297.98	120.09	61.66	298.69	229.28	239.17	220.98	MEAN	57.67	63.99	55.75	15.19	18.42	297.98	120.09	61.66	298.69	229.28	239.17	220.98										
INCHES	0.015	0.015	0.015	0.004	0.005	0.077	0.032	0.016	0.077	0.061	0.062	0.059	INCHES	0.015	0.015	0.015	0.004	0.005	0.077	0.032	0.016	0.077	0.061	0.062	0.059										
STA AV	0.036	0.033	0.039	0.061	0.141	0.097	0.043	0.037	0.080	0.075	0.069	0.046	STA AV	0.036	0.033	0.039	0.061	0.141	0.097	0.043	0.037	0.080	0.075	0.069	0.046										

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000008599. To convert discharge in inches to AC-FT, multiply by 230,667. STA AV based on 8 yr (1964-71) record period.

1971 SELECTED RUNOFF EVENT						CHICKASAW, OKLAHOMA WATERSHED 500 NEAR CHICKASAW									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF								
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)					
EVENT OF DECEMBER 14 - 25, 1971															
12-14		0.001					12-14	1700	101.350	0.0					
								1830	115.550	0.0001					
								1918	155.810	0.0001					
								2030	176.770	0.0002					
								2200	183.900	0.0003					
WATERSHED CONDITIONS:								2400	183.740	0.0004					
For area not included above							12-15	300	191.390	0.0006					
subwatersheds as determined								530	205.840	0.0008					
from a revised 1971 survey								700	237.390	0.0009					
(p. 69.007-1, this publica-								830	308.820	0.0010					
tion); sowed crop - 36%;								1000	400.378	0.0012					
row crop - 2%; alfalfa -								1130	466.550	0.0014					
7%; pasture and range -								1300	507.208	0.0017					
44%; and miscellaneous -								1430	517.240	0.0020					
11%.								1600	511.050	0.0023					
								1730	482.520	0.0026					
								2030	416.040	0.0031					
								2400	343.628	0.0036					
							12-16	400	287.030	0.0041					
								900	246.510	0.0046					
								1600	207.870	0.0052					
								2400	177.170	0.0058					
							12-17	100	173.180	0.0059					
								200	173.830	0.0060					
								300	179.750	0.0061					
								800	205.650	0.0062					
								530	283.908	0.0063					
								700	391.020	0.0065					
								830	505.658	0.0067					
								1000	617.408	0.0070					

1971 SELECTED RUNOFF EVENT										
CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA										
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF DECEMBER 14 - 25, 1971 (CONTINUED)										
							12-17	1130	717.378	0.0074
								1330	826.188	0.0080
								1600	952.698	0.0088
								1830	1034.878	0.0097
								2100	1110.068	0.0107
							12-18	2400	1175.110	0.0119
								218	1206.698	0.0129
								330	1213.490	0.0134
								518	1209.308	0.0142
								700	1190.809	0.0149
								911	1155.599	0.0158
								1200	1090.559	0.0169
								1600	985.550	0.0184
								2000	877.778	0.0197
								2400	776.378	0.0209
							12-19	500	682.469	0.0222
								1100	599.458	0.0236
								1800	536.760	0.0250
								2400	488.550	0.0261
							12-20	600	488.290	0.0271
								1200	428.658	0.0280
								1800	395.520	0.0289
								2400	372.810	0.0297
							12-21	600	339.648	0.0307
								1600	313.020	0.0316
								2400	292.270	0.0325
							12-22	800	273.719	0.0333
								1600	260.448	0.0341
								2400	242.790	0.0348
							12-23	1200	228.710	0.0358
								2400	214.180	0.0368
							12-24	1200	199.650	0.0377
								2400	195.215	0.0385
							12-25	1200	190.780	0.0393
								2400	182.140	0.0401

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003583. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF DECEMBER 14 - 25, 1971

CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA

## CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX

LOCATION: Washita River Watershed above Alex, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham and Roger Mills Counties, Okla.; and Beaufill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--Bt/a sec. 7, T. 5 N., R. 5 W., lat. 34 deg. 55 min., long. 97 deg. 46 min., 1 mile north of Alex, Okla.; at county road bridge over Washita River at river mile 226.5 approximately 3.8 miles downstream from confluence of Winter Creek.

AREA: 306120.00 acres 4783.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971 Q	0.019	0.020	0.018	0.006	0.006	0.096	0.026	0.022	0.079	0.105	0.060	0.069	0.525	
STA AV P	1.21	1.44	1.55	2.52	4.39	2.28	2.06	3.06	4.33	1.84	1.77	1.07	27.52	
Q	0.047	0.043	0.050	0.073	0.138	0.146	0.048	0.039	0.091	0.083	0.085	0.054	0.898	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge			1 Hour			2 Hours			Maximum Volume for Selected Time Interval			1 Day		
Date	Rate	Vol.	Date	Rate	Vol.	Date	Rate	Vol.	Date	Vol.	Date	Rate	Vol.	8 Days
1971	10- 3	0.003	10- 3	0.003	10- 3	0.005	10- 3	0.015	10- 3	0.029	10- 3	0.046	10- 2	0.056 9-27 0.087
MAXIMUMS FOR PERIOD OF RECORD														
	5- 7	0.003	5- 7	0.003	5- 7	0.006	9-20	0.019	9-20	0.035	5- 7	0.064	5- 6	0.114 5- 5 0.336
	1969	1969	1969	1969	1969	1962	1962	1962	1969	1969	1969	1969	1969	1969

NOTES: For the revised watershed conditions, see table below. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA, Misc. Pub. 1216, p. 69.7-21. Precipitation records began Oct. 1961; Runoff records began Sept. 1961. STA AV (P) values are a Thiessen weighted average of 21 gages for 1963-69 and for 77 gages for 1970-71 on the reach from Tabler to Alex., Okla., for a total period of record (1963-71). For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

Revised Watershed Conditions  
Land Use Inventory  
1971 Survey

Watershed Number	Percent Sowed Crop	Percent Cultivation In Row Crop	Alfalfa	Percent Pasture and Range	Percent Miscellaneous 1/
110	30	5	11	29	25
111	16	3	2	73	6
121	10	12	4	56	18
131	15	5	2	67	11
141	7	6	5	65	17
100-200 2/	26	4	9	48	13
311	36	1	3	49	11
411	30	2	9	48	11
200-500 2/	36	2	7	44	11
511	22	3	5	61	9
512	8	0	3	81	8
513	4	0	1	90	5
522	15	1	3	65	16
500-600 2/	23	4	10	51	12
611	3	--	2	95	--
612	--	--	3	97	--
621	9	1	2	77	11
600-700 2/	14	5	9	65	7

1/ Miscellaneous category includes dense timber with little or no forage growth, farmsteads, stomp lots, farm ponds, detention reservoirs, creeks, farm roads, private roads, highways, urban developments, and rocks.

2/ Ungaged area between river gaging stations.

1971 DAILY AIR TEMPERATURE (degrees F)												CHICKASAW, OKLAHOMA WATERSHED 700 NEAR ALEX													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min		max	min	max	min	max	min	max	min	max	min	max	min
1	56	29	38	22	49	33	66	30	88	44	80	60	89	62	69	75	46	35	54	67	82	69	75	46	35
2	57	41	41	27	32	24	67	26	74	52	89	65	90	67	86	54	88	66	84	64	70	38	37	33	33
3	60	25	54	37	43	20	76	42	70	50	82	64	97	70	88	59	91	71	68	56	61	35	38	33	33
4	26	18	57	19	56	27	58	29	85	50	89	60	92	74	77	53	68	36	68	36	38	38	41	45	38
5	29	17	56	12	73	40	57	25	92	65	89	70	101	76	86	64	94	68	81	52	72	49	41	37	37
6	30	14	33	24	50	30	60	26	85	57	92	69	102	74	72	66	98	72	79	53	54	31	40	35	35
7	32	17	27	14	49	28	72	20	81	52	92	60	101	72	86	66	97	71	77	50	55	25	54	35	35
8	42	18	41	7	66	27	82	47	74	48	88	64	96	72	82	67	94	69	70	50	52	37	47	37	37
9	51	22	44	11	59	34	73	88	65	56	88	64	97	76	89	66	95	70	66	45	61	32	40	36	36
10	53	23	62	26	68	26	82	46	82	62	88	65	100	74	92	67	93	64	75	39	69	32	53	31	31
11	50	26	57	38	70	40	83	46	72	54	89	65	100	75	93	68	95	62	84	46	77	35	56	30	30
12	39	27	48	27	76	35	90	50	67	46	88	66	92	54	82	53	76	61	53	76	41	45	38	38	38
13	53	28	52	18	86	37	72	42	72	40	86	70	102	78	78	68	97	54	75	56	77	54	51	26	26
14	42	26	56	33	78	42	72	28	78	40	90	68	103	76	78	69	96	60	78	49	78	58	69	40	40
15	49	22	66	22	65	34	84	47	82	44	90	66	104	75	77	70	87	63	81	58	71	62	55	35	35
16	54	26	71	40	62	36	75	60	92	52	90	67	98	73	88	68	81	56	85	65	65	61	50	34	34
17	59	27	70	30	73	30	74	56	90	67	88	68	104	74	90	69	68	51	74	65	69	51	54	30	30
18	42	25	68	50	62	36	78	56	89	54	96	72	104	76	88	69	53	50	72	60	50	31	51	27	27
19	32	18	61	43	58	30	84	56	76	42	92	70	87	72	87	69	57	45	76	53	54	27	62	35	35
20	56	25	49	32	60	18	80	50	82	48	88	66	88	67	88	68	70	41	60	52	71	29	68	30	30
21	57	33	36	23	78	46	92	50	84	56	83	68	93	57	91	72	72	45	68	48	57	37	52	30	30
22	59	30	35	23	56	36	82	58	82	70	90	66	88	72	95	74	68	52	65	49	42	33	47	28	28
23	46	22	52	24	52	30	64	42	86	72	91	70	80	70	95	72	61	56	67	68	40	34	66	44	44
24	27	24	62	28	83	32	78	32	81	51	95	70	88	67	83	69	63	58	72	44	54	65	39	39	39
25	66	23	68	50	58	38	88	56	91	51	97	70	95	67	88	66	79	62	75	52	51	34	68	40	40
26	50	30	56	34	65	30	90	59	92	60	96	72	81	69	91	63	85	70	70	55	58	35	66	53	53
27	50	22	55	29	50	30	75	53	76	60	94	72	91	68	92	65	86	72	75	52	59	28	67	30	30
28	63	23	54	34	66	51	68	42	78	59	91	70	85	64	93	65	82	71	76	50	51	37	48	28	28
29	73	33	64	40	59	52	68	60	91	68	84	61	84	65	84	70	75	55	41	33	61	42	41	42	42
30	57	30	80	40	70	50	76	60	94	72	80	57	86	62	83	69	69	46	38	35	54	37	37	37	37
31	38	22	82	54			88	60			83	54	90	63			69	36					52	31	31
AV.	49	25	52	28	63	35	75	44	80	54	90	68	94	70	87	66	83	62	74	52	60	38	53	34	34
MEAN	36.9		40.1	49.1	55.7		67.4	78.7	82.1		76.5	72.4	63.4		63.4		49.5		43.5						
STA AV	48	25	52	28	60	36	74	49	80	57	88	67	94	71	91	68	83	61	73	49	63	37	52	30	30

NOTES: Data recorded at CBS location station. AV and STA AV are rounded to the nearest degree. Mean rounded to the tenth of a degree. STA AV based on records from Sept. 1962 through Dec. 1971. For Chickasaw Experiment Station Evaporation Data, see National Weather Service Climatological Data for Oklahoma.

1971 DAILY PRECIPITATION (inches)												CHICKASAW, OKLAHOMA WATERSHED 700 NEAR ALEX														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.34	0.0	0.0	0.0	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.06	0.0	0.0	0.06	0.0	0.0	0.35	0.01	0.0	0.0	0.0	3.11	0.0	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.50	0.0	0.0	0.0	0.0	0.01	0.49	0.0	0.0	0.0	0.15	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.01	0.0	0.0	0.0	0.0	0.40	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.82	0.0	0.09	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	
9	0.0	0.0	0.0	0.0	0.0	0.38	0.04	0.02	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.05	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.01	0.0	1.25	0.03	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.41	0.0	0.0	0.0	0.10	0.0	0.0	0.0	1.75	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.01	0.0	0.09	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.01	0.05	0.0	0.05	0.0	0.57	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	1.32	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.72	0.0	0.88	0.01	0.28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.02	1.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.04	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.07	0.77	0.0	0.01	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.01	0.0	0.02	0.0	0.0	0.0	0.79	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.07	0.02	0.02	0.0	0.15	0.0	0.0	0.03	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	
30	0.0	0.0	0.0	0.35	0.06	0.0	0.0	0.0	0.0	0.0	0.03	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.56	1.82	0.09	0.55	2.52	4.49	3.73	2.29	4.22	5.38	5.67	0.58	2.97	STA AV	1.21	1.44	1.55	2.54	4.39	2.28	2.06	3.06	4.33	1.84	1.77	1.07

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	64.1	71.6	91.7	38.4	23.9	1227.8	33.8	98.3	24.1	336.2	696.6	105.6			
2	64.9	69.8	90.3	38.7	17.8	728.3	35.0	66.7	149.9	260.0	1577.4	111.9			
3	102.3	71.6	93.0	33.0	16.8	1937.8	44.9	66.5	113.3	5857.5	886.1	126.5			
4	85.5	74.4	106.2	29.3	21.0	1268.5	473.3	58.4	84.6	131.2	495.2	135.4			
5	67.3	75.1	110.4	28.7	17.6	398.5	177.6	44.8	55.3	809.6	351.4	136.9			
6	60.6	71.8	103.7	28.4	13.9	204.4	674.4	44.8	43.1	931.6	293.8	138.7			
7	59.4	68.4	95.1	26.0	12.3	116.6	389.1	34.4	35.3	486.4	262.9	136.7			
8	60.1	55.9	89.4	23.3	11.7	1253.6	189.0	33.1	26.5	336.6	230.7	137.0			
9	61.0	51.9	88.1	22.5	16.4	598.7	125.5	98.3	146.6	262.2	204.0	179.5			
10	62.9	55.4	84.9	22.4	26.0	281.7	92.2	77.8	229.3	219.7	186.5	194.9			
11	75.1	80.0	80.7	22.3	27.4	212.6	70.7	45.2	140.3	188.4	172.2	169.4			
12	111.0	89.8	78.4	20.9	20.3	523.0	58.0	35.7	105.5	169.8	159.1	146.6			
13	111.6	82.6	77.8	18.5	15.9	485.4	39.1	37.3	93.7	151.0	148.9	130.7			
14	97.6	78.5	75.9	18.2	12.5	409.3	26.6	388.9	84.1	133.7	135.9	293.1			
15	90.7	72.6	75.0	16.9	10.0	393.9	18.4	392.3	70.5	126.4	133.8	749.6			
16	83.8	73.3	75.1	15.8	6.9	382.8	10.4	294.9	61.8	119.6	130.4	551.3			
17	82.7	74.0	71.3	19.3	5.0	265.0	4.2	205.9	51.4	111.2	127.1	414.2			
18	82.3	77.4	66.1	21.4	4.6	155.7	2.0	128.6	563.3	114.3	122.2	1118.0			
19	78.9	100.7	61.4	21.5	3.3	117.1	2.3	88.0	246.2	115.0	119.9	816.9			
20	74.6	92.8	59.7	23.2	2.9	96.7	2.1	130.2	108.1	173.1	116.2	538.7			
21	75.5	169.7	61.5	25.9	2.5	252.3	1.7	90.8	506.6	129.9	113.4	411.5			
22	75.7	277.7	61.3	23.4	2.4	548.0	1.7	64.5	830.0	98.0	112.9	331.6			
23	78.6	159.6	61.6	19.8	7.6	157.9	6.9	53.0	408.7	89.3	118.5	279.7			
24	73.1	123.2	60.1	20.6	21.3	84.4	11.7	45.5	595.6	88.4	122.2	249.8			
25	74.3	111.6	58.1	20.9	12.6	58.9	29.6	43.5	1369.8	113.7	119.8	221.9			
26	73.5	107.3	56.2	20.1	5.4	47.0	21.7	36.8	502.5	126.7	113.4	204.2			
27	72.5	100.6	54.5	22.3	64.6	82.2	7.7	30.3	944.2	152.4	108.5	187.2			
28	77.0	91.5	53.9	27.2	210.8	39.7	50.2	23.0	1250.9	142.5	107.5	176.3			
29	75.9	51.6	27.2	35.4	37.9	108.3	22.6	818.2	125.7	105.4	173.2				
30	74.8	44.3	23.0	21.6	35.7	91.6	24.8	473.8	107.1	105.1	184.7				
31	74.3	44.3	20.0			86.1	26.5		99.6			90.7			
MEAN	77.33	93.89	73.77	23.84	22.92	412.08	107.29	91.21	340.30	435.00	256.26	285.25			
INCHES	0.019	0.020	0.018	0.006	0.006	0.096	0.026	0.022	0.079	0.105	0.060	0.069			
STA AV	0.047	0.043	0.050	0.073	0.138	0.146	0.048	0.039	0.091	0.083	0.085	0.054			

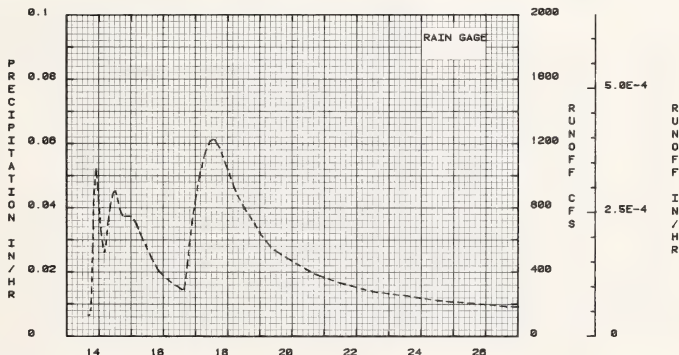
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000007776. To convert discharge in inches to AC-Ft, multiply by 255,093. STA AV based on 11 yr (1961-71) record period.

1971 SELECTED RUNOFF EVENT												CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX			
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF			
Date	Rainfall	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			Date	Time	Rate	Acc.
Mo-day	(inches)	(inches)	Mo-day	(in/hr)	(inches)	Mo-day	(in/hr)	(cfs)	(inches)			Mo-day	(in/hr)	(cfs)	(inches)
EVENT OF DECEMBER 14 - 27, 1971															
12-14															
0.001															
12-14															
1600															
1700															
1730															
1800															
1830															
1853															
1918															
1941															
2000															
2100															
2130															
2148															
2211															
2230															
2311															
2400															
12-15															
130															
300															
400															
430															
530															
700															
900															
1100															
1200															
1300															
1530															
1730															
1900															
2400															
12-16															
400															
900															
1500															
2000															
2400															

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1971 SELECTED RUNOFF EVENT						CHICKASAW, OKLAHOMA WATERSHED 700 NEAR ALEX					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF DECEMBER 14 - 27, 1971 (CONTINUED)											
			12-17				1200	600	333.398	0.0124	
							1400	1200	300.300	0.0130	
							1530	1400	289.198	0.0132	
							1630	1530	292.000	0.0133	
								1630	336.198	0.0134	
							1800	1800	445.898	0.0136	
							1930	1930	573.300	0.0138	
							2130	2130	704.500	0.0142	
							2400	2400	850.898	0.0146	
			12-18				300	300	993.898	0.0157	
							700	700	1138.799	0.0171	
							1100	1100	1215.598	0.0186	
							1300	1300	1226.398	0.0194	
							1430	1430	1222.099	0.0200	
							1800	1800	1170.998	0.0214	
							2400	2400	1036.798	0.0235	
			12-19				600	600	900.498	0.0254	
							1200	1200	801.799	0.0271	
							1800	1800	726.398	0.0286	
							2400	2400	641.100	0.0299	
			12-20				800	800	555.600	0.0315	
							1600	1600	506.198	0.0329	
							2400	2400	467.600	0.0342	
			12-21				1030	1030	416.698	0.0357	
							1800	1800	381.898	0.0367	
							2400	2400	368.198	0.0374	
			12-22				1200	1200	329.600	0.0387	
							2400	2400	302.998	0.0399	
			12-23				1200	1200	276.300	0.0410	
							2400	2400	263.350	0.0420	
			12-24				1200	1200	250.400	0.0430	
							2400	2400	235.200	0.0439	
			12-25				1200	1200	220.000	0.0448	
							2400	2400	212.300	0.0456	
			12-26				1200	1200	204.600	0.0464	
							2400	2400	195.400	0.0472	
			12-27				1200	1200	186.200	0.0479	
							2400	2400	180.900	0.0486	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF DECEMBER 14 - 27, 1971  
CHICKASAW, OKLAHOMA WATERSHED 700 NEAR ALEX

## CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX

LOCATION: Big Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Washita River; Red River Basin.

AREA: 4895.00 acres 7.57 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	0.50	1.86	0.10	0.46	4.10	3.80	1.56	5.25	5.14	4.37	0.53	3.24	30.91														
	0.050	0.082	0.064	0.050	0.052	0.068	0.003	0.135	0.144	0.372	0.057	0.276	1.351														
STA AV P	1.00	1.28	1.54	2.27	3.87	2.75	1.84	2.74	4.51	1.92	1.94	1.13	26.77														
	0.072	0.087	0.097	0.138	0.256	0.190	0.061	0.039	0.244	0.088	0.079	0.081	1.432														
ANNUAL MAXIMUM DISCHARGE (1a/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days			
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1971	9-24	0.036	9-24	0.033	9-24	0.056	10- 2	0.091	10- 2	0.114	10- 2	0.136	10- 2	0.171	10- 2	0.268											
MAXIMUMS FOR PERIOD OF RECORD																											
5- 9	0.501	5- 9	0.423	5- 9	0.557	5- 9	0.649	5- 9	0.667	5- 9	0.880	5- 9	0.988	5- 6	1.154												
1964		1964		1964		1964		1964		1964		1964		1964													

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 35; alfalfa 25; pasture and range - 95%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, pp. 69.8-5 (topography), 69.7-9 (geologic) and 1965, p. 69.7-21 (Composite). Precipitation data obtained from Thiessen weighted average of 7 gages. Precipitation records began Oct. 1961; runoff records began Dec. 1961. For long-time precipitation records, see National Weather Service at Chickasaw, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.05													
2	0.08	0.0	0.06	0.0	0.0	0.15	0.0	0.0	0.0	2.05	0.0	0.62													
3	0.42	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.24	0.0	0.15													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.57	0.0	0.10	0.0	0.38													
9	0.0	0.0	0.0	0.0	0.60	0.49	0.0	0.0	0.01	0.0	0.0	0.18													
10	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.07	0.0	0.0	0.0	0.21													
11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.06	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.77	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.66	0.0	0.0	0.0	1.14													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.99	0.02	0.03	0.0													
18	0.0	0.21	0.0	0.0	0.10	0.0	0.0	0.0	1.62	0.33	0.0	0.0													
19	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.10	0.99	0.0	0.0													
20	0.0	0.0	0.0	0.09	0.0	0.32	0.0	0.0	0.0	0.09	0.0	0.0													
21	0.0	1.60	0.0	0.0	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.05	0.0	0.0	0.13	0.0	0.01	0.0	0.41	0.0													
23	0.0	0.0	0.0	0.0	0.82	0.0	0.73	0.0	0.33	0.0	0.03	0.0													
24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	1.96	0.0	0.0	0.0													
25	0.0	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.53	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.02	0.0	0.01	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.11	0.03	0.0	0.0	0.13	0.0	0.0	0.0	0.35													
30	0.0	0.0	0.0	0.33	0.53	0.0	0.0	0.0	0.0	0.02	0.06	0.0													
31	0.0	0.0	0.0	1.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.50	1.86	0.10	0.46	4.10	3.80	1.56	5.25	5.14	4.37	0.53	3.24													
STA AV	1.00	1.28	1.54	2.27	3.87	2.75	1.84	2.74	4.51	1.92	1.94	1.13													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 7 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

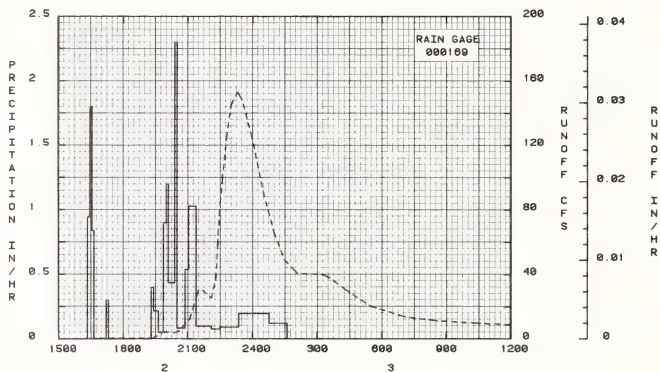
1971 MEAN DAILY DISCHARGE (cfs)													CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.305	0.274	0.480	0.345	0.296	3.466	0.326	0.0	0.031	0.204	0.474	0.357	1	0.305	0.274	0.480	0.345	0.296	3.466	0.326	0.0	0.031	0.204	0.474	0.357
2	0.360	0.274	0.480	0.340	0.269	0.247	0.081	0.0	0.030	10.780	0.430	0.475	2	0.360	0.274	0.480	0.340	0.269	0.247	0.081	0.0	0.030	10.780	0.430	0.475
3	0.605	0.301	0.480	0.340	0.235	3.026	0.051	0.0	0.029	18.423	0.392	0.561	3	0.605	0.301	0.480	0.340	0.235	3.026	0.051	0.0	0.029	18.423	0.392	0.561
4	0.346	0.330	0.480	0.340	0.230	0.257	0.031	0.0	0.021	7.095	0.417	0.536	4	0.346	0.330	0.480	0.340	0.230	0.257	0.031	0.0	0.021	7.095	0.417	0.536
5	0.274	0.305	0.474	0.340	0.226	0.156	0.022	0.0	0.020	5.680	0.386	0.517	5	0.274	0.305	0.474	0.340	0.226	0.156	0.022	0.0	0.020	5.680	0.386	0.517
6	0.274	0.291	0.430	0.345	0.200	0.121	0.026	0.746	0.020	4.327	0.380	0.431	6	0.274	0.291	0.430	0.345	0.200	0.121	0.026	0.746	0.020	4.327	0.380	0.431
7	0.296	0.239	0.392	0.375	0.174	0.100	0.011	0.142	0.020	3.314	0.380	0.351	7	0.296	0.239	0.392	0.375	0.174	0.100	0.011	0.142	0.020	3.314	0.380	0.351
8	0.305	0.239	0.424	0.375	0.191	0.082	0.001	0.334	0.020	2.635	0.380	0.576	8	0.305	0.239	0.424	0.375	0.191	0.082	0.001	0.334	0.020	2.635	0.380	0.576
9	0.335	0.296	0.430	0.345	0.319	0.567	0.0	0.296	0.020	1.859	0.386	0.736	9	0.335	0.296	0.430	0.345	0.319	0.567	0.0	0.296	0.020	1.859	0.386	0.736
10	0.340	0.340	0.430	0.340	0.335	0.185	0.0	0.022	0.019	1.416	0.424	1.756	10	0.340	0.340	0.430	0.340	0.335	0.185	0.0	0.022	0.019	1.416	0.424	1.756
11	0.340	0.370	0.430	0.340	0.296	0.237	0.0	0.019	0.011	1.144	0.430	0.734	11	0.340	0.370	0.430	0.340	0.296	0.237	0.0	0.019	0.011	1.144	0.430	0.734
12	0.340	0.340	0.430	0.335	0.235	2.389	0.0	0.011	0.009	0.972	0.424	0.457	12	0.340	0.340	0.430	0.335	0.235	2.389	0.0	0.011	0.009	0.972	0.424	0.457
13	0.340	0.310	0.430	0.305	0.200	0.254	0.0	0.110	0.002	0.811	0.386	0.806	13	0.340	0.310	0.430	0.305	0.200	0.254	0.0	0.110	0.002	0.811	0.386	0.806
14	0.335	0.335	0.430	0.305	0.171	0.197	0.0	13.990	0.007	0.709	0.380	15.516	14	0.335	0.335	0.430	0.305	0.171	0.197	0.0	13.990	0.007	0.709	0.380	15.516
15	0.310	0.340	0.430	0.340	0.149	0.152	0.0	10.179	0.001	0.640	0.380	7.564	15	0.310	0.340	0.430	0.340	0.149	0.152	0.0	10.179	0.001	0.640	0.380	7.564
16	0.335	0.340	0.430	0.381	0.121	0.121	0.0	0.879	0.002	0.581	0.380	4.497	16	0.335	0.340	0.430	0.381	0.121	0.121	0.0	0.879	0.002	0.581	0.380	4.497
17	0.340	0.345	0.424	0.417	0.102	0.099	0.0	0.281	0.050	0.557	0.380	3.559	17	0.340	0.345	0.424	0.417	0.102	0.099	0.0	0.281	0.050	0.557	0.380	3.559
18	0.335	0.375	0.381	0.386	0.100	0.074	0.0	0.156	2.681	0.649	0.380	2.557	18	0.335	0.375	0.381	0.386	0.100	0.074	0.0	0.156	2.681	0.649	0.380	2.557
19	0.305	0.375	0.350	0.380	0.097	0.071	0.0	0.087	0.156	1.421	0.380	1.754	19	0.305	0.375	0.350	0.380	0.097	0.071	0.0	0.087	0.156	1.421	0.380	1.754
20	0.300	0.345	0.381	0.375	0.081	0.096	0.0	0.069	0.059	3.743	0.380	1.329	20	0.300	0.345	0.381	0.375	0.081	0.096	0.0	0.069	0.059	3.743	0.380	1.329
21	0.300	5.244	0.417	0.345	0.072	1.236	0.0	0.052	0.050	1.169	0.380	1.141	21	0.300	5.244	0.417	0.345	0.072	1.236	0.0	0.052	0.050	1.169	0.380	1.141
22	0.300	1.124	0.386	0.340	0.079	0.176	0.0	0.049	0.050	0.920	0.386	1.050	22	0.300	1.124	0.386	0.340	0.079	0.176	0.0	0.049	0.050	0.920	0.386	1.050
23	0.300	0.796	0.380	0.335	0.552	0.109	0.0	0.042	0.062	0.822	0.412	0.980	23	0.300	0.796	0.380	0.335	0.552	0.109	0.0	0.042	0.062	0.822	0.412	0.980
24	0.300	0.752	0.386	0.305	0.257	0.096	0.0	0.040	0.110	0.409	0.351	0.570	24	0.300	0.752	0.386	0.305	0.257	0.096	0.0	0.040	0.110	0.409	0.351	0.570
25	0.300	0.700	0.424	0.300	0.115	0.074	0.0	0.050	3.515	0.632	0.345	0.970	25	0.300	0.700	0.424	0.300	0.115	0.074	0.0	0.050	3.515	0.632	0.345	0.970
26	0.300	0.634	0.430	0.300	0.162	0.067	0.0	0.049	1.597	0.755	0.370	0.970	26	0.300	0.634	0.430	0.300	0.162	0.067	0.0	0.049	1.597	0.755	0.370	0.970
27	0.305	0.537	0.430	0.296	0.396	0.052	0.0	0.041	0.626	1.261	0.350	0.961	27	0.305	0.537	0.430	0.296	0.396	0.052	0.0	0.041	0.626	1.261	0.350	0.961
28	0.335	0.486	0.424	0.277	0.206	0.052	0.0	0.040	0.359	0.707	0.370	0.926	28	0.335	0.486	0.424	0.277	0.206	0.052	0.0	0.040	0.359	0.707	0.370	0.926
29	0.340	0.386	0.296	0.162	0.065	0.0	0.040	0.296	0.640	0.345	1.260		29	0.340	0.386	0.296	0.162	0.065	0.0	0.040	0.296	0.640	0.345	1.260	
30	0.335	0.380	0.300	0.257	0.057	0.0	0.040	0.235	0.575	0.380	1.456		30	0.335	0.380	0.300	0.257	0.057	0.0	0.040	0.235	0.575	0.380	1.456	
31	0.301	0.375	0.425	0.250	0.0	0.039	0.0	0.039	0.492	0.492	0.587		31	0.301	0.375	0.425	0.250	0.0	0.039	0.0	0.039	0.492	0.492	0.587	
MEAN	0.3276	0.5942	0.4205	0.3382	0.3400	0.4629	0.0178	0.8843	0.9770	2.4408	0.3867	1.8104	MEAN	0.3276	0.5942	0.4205	0.3382	0.3400	0.4629	0.0178	0.8843	0.9770	2.4408	0.3867	1.8104
INCHES	0.050	0.082	0.064	0.050	0.052	0.068	0.003	0.135	0.144	0.372	0.057	0.276	INCHES	0.050	0.082	0.064	0.050	0.052	0.068	0.003	0.135	0.144	0.372	0.057	0.276
STA AV	0.072	0.087	0.097	0.138	0.256	0.190	0.061	0.039	0.244	0.088	0.079	0.081	STA AV	0.072	0.087	0.097	0.138	0.256	0.190	0.061	0.039	0.244	0.088	0.079	0.081

NOTES: To convert runoff in CFS to IN/DAY, multiply by 0.004913. STA AV based on 11 yr (1961-1971) record period.

1971 SELECTED RUNOFF EVENT						CHICKASAW, OKLAHOMA WATERSHED 611 NEAR ALEX													
ATTENDANT CONDITIONS			RAINFALL				RUNOFF												
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF OCTOBER 2 - 7, 1971																			
RG 000169						RG 000169													
10- 2	0.0	0.001	10- 2	1620	0.0	0.0	10- 2	1630	0.200	0.0									
				1627	0.9428	0.11		1641	0.340	0.0									
				1633	1.8002	0.29		1736	0.430	0.0001									
				1638	0.8399	0.36		1923	0.380	0.0002									
				1713	0.0	0.36		1953	4.090	0.0004									
WATERSHED CONDITIONS:																			
From a revised 1971 survey																			
(p. 69.007-1, this publication): sowed crop -																			
3%; alfalfa - 2%; pasture																			
and range - 95%.																			
				1719	0.3000	0.39		2023	3.580	0.0008									
				1919	0.0	0.39		2036	5.050	0.0010									
				1925	0.4000	0.43		2106	12.420	0.0019									
				1939	0.2143	0.48		2119	21.530	0.0026									
				1952	0.0462	0.49		2130	30.100	0.0037									
				2000	0.8999	0.61		2141	30.100	0.0048									
				2006	1.2001	0.73		2206	25.070	0.0072									
				2024	0.4333	0.86		2218	37.690	0.0085									
				2030	2.2999	1.09		2223	58.640	0.0093									
				2052	0.0818	1.12		2230	84.240	0.0110									
				2102	0.0400	1.21		2236	99.170	0.0128									
				2123	1.0286	1.57		2248	125.040	0.0174									
				2206	0.0977	1.64		2300	145.320	0.0230									
				2230	0.0750	1.67		2318	153.010	0.0321									
				2322	0.0923	1.75		2330	148.360	0.0384									
10- 3			10- 3	47	0.1976	2.03	2400	123.660	0.0523										
			137	0.1200	2.13	10- 3	30	90.950	0.0633										
							700	65.930	0.0713										
							130	86.640	0.0772										
							206	40.450	0.0826										
							318	39.750	0.0924										
							336	37.690	0.0948										
							430	28.930	0.1010										
							530	20.110	0.1060										
							706	13.490	0.1115										

1971 SELECTED RUNOFF EVENT									
CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF		
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)
EVENT OF OCTOBER 2 - 7, 1971 (CONTINUED)									
			10- 3	836			1036	836	0.1153
							1336	9.520	0.1195
							1900	8.660	0.1251
							1900	8.380	0.1345
							2400	7.840	0.1428
			10- 4	1200			2400	7.080	0.1611
							2400	6.380	0.1776
			10- 5	1200			2400	5.680	0.1924
							2400	4.980	0.2055
			10- 6	1200			2400	4.280	0.2169
							2400	3.770	0.2268
			10- 7	1200			2400	3.260	0.2354
							2400	2.965	0.2430

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002047.



EVENT OF OCTOBER 2 - 7, 1971  
CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX

## CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX

LOCATION: Little Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Big Dry Creek, Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 33, T. 6 N., R. 6 W., lat. 35 deg. 57 min., long. 97 deg. 51 min., 5 miles northwest of Alex, Okla.; on state road 19 bridge over Little Dry Creek.

AREA: 563.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	0.38	1.73	0.08	0.50	4.33	3.39	1.57	6.02	5.20	4.56	0.51	3.20	31.47												
Q	0.0	0.040	0.000	0.0	0.073	0.051	0.001	0.476	0.224	0.239	0.0	0.123	1.227												
STA AV P	0.97	1.24	1.88	2.53	3.78	2.76	2.03	2.80	4.53	1.92	1.86	1.10	27.00												
Q	0.087	0.064	0.061	0.163	0.123	0.203	0.082	0.056	0.198	0.044	0.027	0.113	1.222												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days											
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	8-14	0.163	8-14	0.116	10-2	0.158	8-14	0.206	8-14	0.228	8-14	0.810	8-13	0.411	8-7	0.425									
MAXIMUMS FOR PERIOD OF RECORD																									
7-1	0.493	6-23	0.345	6-23	0.549	6-23	0.733	6-23	0.756	6-23	0.756	6-23	0.756	6-23	0.785										
1968	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963										

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); alfalfa - 3%; pasture and range - 97%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.8-5 (topography) and p. 69.7-9 (geologic); 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 2 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Nov. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.05													
2	0.08	0.0	0.05	0.0	0.0	0.13	0.0	0.0	0.0	2.38	0.0	0.56													
3	0.30	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.27	0.0	0.18													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.39	0.0	0.0	0.0	0.0													
7	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.08	0.01	0.35													
9	0.0	0.0	0.0	0.0	0.65	0.49	0.03	0.0	0.0	0.0	0.0	0.20													
10	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.01	0.0	0.0	0.0	0.21													
11	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.01	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.50	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.51	0.0	0.0	0.0	1.14													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.01													
16	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.00	0.01	0.02	0.0													
18	0.0	0.18	0.0	0.0	0.11	0.0	0.0	0.0	1.60	0.40	0.0	0.0													
19	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.10	0.86	0.0	0.0													
20	0.0	0.0	0.0	0.11	0.0	0.28	0.0	0.0	0.0	0.06	0.0	0.0													
21	0.0	1.48	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.03	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.89	0.0	0.63	0.0	0.31	0.0	0.02	0.0													
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	2.04	0.0	0.0	0.0													
25	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.48	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.02	0.0	0.0	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.16	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38													
30	0.0	0.0	0.0	0.0	0.33	0.06	0.0	0.0	0.0	0.02	0.06	0.0													
31	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.38	1.73	0.08	0.50	4.33	3.39	1.57	6.02	5.20	4.56	0.51	3.20													
STA AV	0.97	1.24	1.48	2.53	3.78	2.76	2.03	2.80	4.53	1.92	1.86	1.10													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 2 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.412	0.0	0.0				
3	0.0	0.0	0.001	0.0	0.0	0.808	0.0	0.0	0.0	0.690	0.0	0.0				
4	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.224	0.0	0.0	0.0	0.0				
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.322	0.0	0.0	0.0	0.0				
9	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.320	0.0	0.0	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.272	0.0	0.0	0.0	0.0				
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.451	0.0	0.0	0.0	0.0				
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.036	0.0	0.0	0.0				
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.480	0.0	0.0				
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	0.0				
21	0.0	0.724	0.0	0.0	0.0	0.046	0.0	0.0	0.0	0.0	0.0	0.0				
22	0.0	0.059	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.079	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
24	0.0	0.057	0.0	0.0	0.0	0.0	0.0	0.0	4.259	0.0	0.0	0.0				
25	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
26	0.0	0.001	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.019	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.0	0.0	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.060				
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025				
31	0.0	0.0	0.0	0.0	1.683	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MEAN	0.0	0.0334	0.0003	0.0	0.0553	0.0401	0.0006	0.3635	0.1765	0.1825	0.0	0.0941				
INCHES	0.0	0.040	0.000	0.0	0.073	0.051	0.001	0.476	0.224	0.239	0.0	0.123				
STA AV	0.087	0.064	0.061	0.163	0.123	0.203	0.082	0.056	0.198	0.044	0.027	0.113				

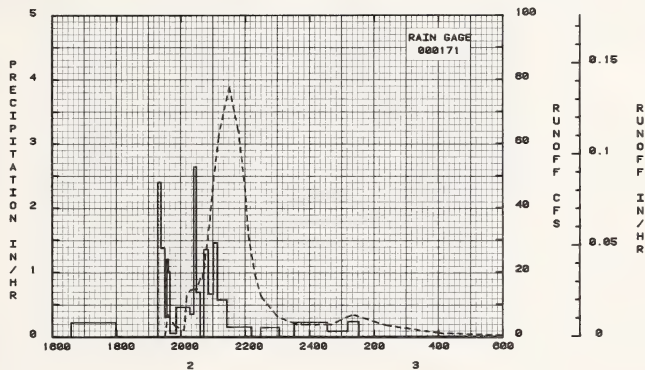
NOTES: To convert mean daily discharge in CFS to 18/24, multiply by 0.04228. To convert discharge in inches to AC-FT, multiply by 46.92. STA AV based on 11 yr (1961-71) record period.

1971 SELECTED RUNOFF EVENT													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX			
PRECEDENT CONDITIONS			RAINFALL				RUNOFF									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.						
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)						
EVENT OF OCTOBER 2 - 3, 1971																
10- 2	RG 000171		10- 2	RG 000171			1930	0.0	0.0							
	0.0	0.0		1635	0.0	0.0	1936	6.830	0.0006							
				1758	0.2169	0.30	1948	3.370	0.0024							
				1917	0.0	0.30	2006	1.850	0.0038							
				1923	2.3999	0.54	2011	12.650	0.0048							
				1930	1.3714	0.70										
WATERSHED CONDITIONS:																
From a revised 1971 survey																
(p. 69.007-1, this publication); alfalfa - 38; and																
pasture and range - 57%.																
				1934	0.3000	0.72	2018	14.470	0.0076							
				1937	1.2003	0.78	2030	14.850	0.0128							
				1940	0.9999	0.83	2036	18.120	0.0156							
				1952	0.0500	0.84	2041	18.120	0.0182							
				2017	0.4560	1.03	2053	34.670	0.0276							
				2024	0.3429	1.07	2100	47.060	0.0360							
				2029	2.6402	1.29	2111	63.200	0.0534							
				2036	0.6857	1.37	2130	77.610	0.0931							
				2043	0.0	1.37	2148	63.200	0.1299							
				2051	1.3500	1.55	2200	44.970	0.1493							
				2101	0.6600	1.66	2206	31.370	0.1559							
				2108	1.4571	1.83	2218	19.220	0.1648							
				2126	0.5667	2.00	2230	12.300	0.1704							
				2212	0.1435	2.11	2300	6.150	0.1785							
				2229	0.0	2.11	2336	3.680	0.1837							
				2304	0.1371	2.19	2400	3.680	0.1863							
				2332	0.0	2.19	41	3.680	0.1907							
10- 3				33	0.2164	2.41	100	5.300	0.1932							
				111	0.0789	2.46	118	6.600	0.1963							
				132	0.2286	2.54	123	6.600	0.1973							
							200	4.540	0.2034							
							223	3.370	0.2061							
							400	0.930	0.2122							
							636	0.210	0.2148							
							900	0.050	0.2154							

NOTES: To convert runoff in CFS to 18/24, multiply by 0.001762.

1971 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX								
ATTACHED CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 2 - 3, 1971 (CONTINUED)											
									1123	0.0	0.2155

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001762.



EVENT OF OCTOBER 2 - 3, 1971  
CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX

## CHICKASAW, OKLAHOMA WATERSHED 111 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above County road South of Anadarko in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION—W-1/4 sec. 34, T. 7 N., R. 10 W., lat. 35 deg. 03 min., long. 98 deg. 15 min., 2 miles South of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 16634.00 acres 26.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASAW, OKLAHOMA WATERSHED 111 NEAR ANADARKO												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	0.89	1.25	0.05	0.38	5.07	2.90	2.19	5.47	5.02	4.25	0.71	2.57	30.75												
Q	0.011	0.014	0.010	0.007	0.083	0.025	0.0	0.018	0.007	0.020	0.017	0.058	0.271												
STA AV P	0.65	1.04	1.33	2.46	3.78	2.97	1.87	2.74	4.09	1.80	1.83	0.92	25.48												
Q	0.072	0.077	0.089	0.134	0.165	0.064	0.032	0.016	0.047	0.028	0.063	0.062	0.849												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge													Maximum Volume for Selected Time Interval												
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days						Date	Date	Date	Date	Date							
1971	5-31	0.024	5-31	0.022	5-31	0.042	5-31	0.086	5-31	0.052	5-31	0.096	5-31	0.100	5-29	0.102									
MAXIMUMS FOR PERIOD OF RECORD																									
	5-10	0.046	5-10	0.044	5-10	0.080	5-10	0.135	5-10	0.149	5-9	0.234	5-9	0.295	5-9	0.320									
1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964									

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 16%; row crop - 3%; alfalfa - 2%; pasture and range - 73%; and miscellaneous - 6%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21 and 1962, USDA Misc. Pub. 1070, p. 69.7-3 (geologic) and p. 69.10-4 (topography). Precipitation data obtained from a Thiessen weighted average of 6 gages on the watershed. Precipitation records began Oct. 1961; runoff records began June 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

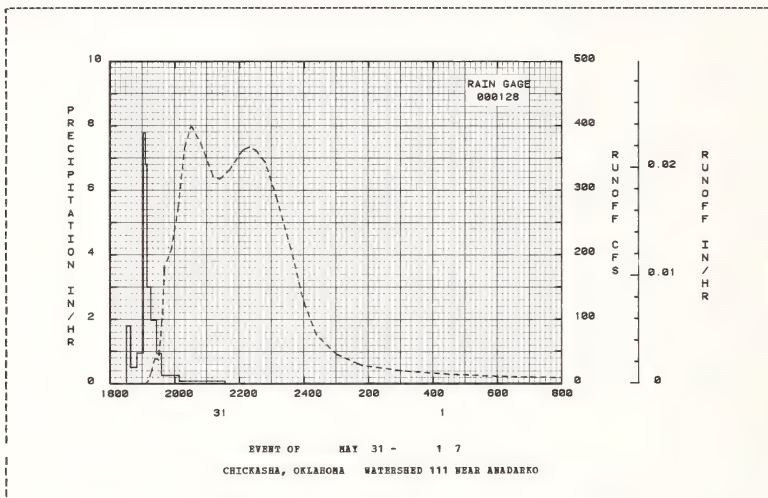
1971 DAILY PRECIPITATION (inches)													CHICKASAW, OKLAHOMA WATERSHED 111 NEAR ANADARKO												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.02	0.0	0.12	0.0	0.0	0.0	0.0	0.06													
2	0.11	0.0	0.05	0.0	0.0	0.0	0.02	0.0	0.0	1.59	0.0	0.52													
3	0.78	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.09													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.05	0.0	0.0	1.67	0.0	0.04	0.0	0.16													
9	0.0	0.0	0.0	0.0	0.76	0.60	0.0	0.0	0.0	0.0	0.0	0.11													
10	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.03	0.0	0.0	0.0	0.13													
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.13	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.16	0.0	0.0	0.0	1.12													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.01													
16	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.07	0.0	0.0	0.17	0.0	1.11	0.12	0.04	0.0													
18	0.0	0.25	0.0	0.0	0.09	0.0	0.0	0.0	1.54	0.69	0.0	0.0													
19	0.0	0.0	0.0	0.20	0.0	0.0	0.01	0.0	0.04	0.21	0.0	0.0													
20	0.0	0.03	0.0	0.02	0.0	0.38	0.0	0.0	0.0	0.03	0.0	0.0													
21	0.0	0.92	0.0	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.0	0.0	0.0	0.59	0.0													
23	0.0	0.0	0.0	0.0	0.48	0.0	0.46	0.0	0.19	0.0	0.01	0.0													
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.02	1.71	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	1.18	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.01	0.0	0.02	0.0	0.0	1.22	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.02	0.01	0.0	0.0	0.84	0.0	0.29	0.0	0.20													
30	0.0	0.0	0.0	0.0	0.88	0.39	0.0	0.0	0.0	0.10	0.07	0.0													
31	0.0	0.0	0.0	0.0	2.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.89	1.25	0.05	0.38	5.07	2.90	2.19	5.47	5.02	4.25	0.71	2.57													
STA AV	0.65	1.04	1.33	2.46	3.78	2.97	1.87	2.74	4.09	1.80	1.83	0.92													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 6 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.



1971 SELECTED RUNOFF EVENT				CHICKASAW, OKLAHOMA				WATERSHED 111 NEAR ANADARKO			
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 31 - 1 7											
							6- 1	1030	6.520	0.0934	
								1300	5.750	0.0903	
								1530	4.870	0.0951	
								2100	3.930	0.0965	
								2400	3.370	0.0972	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00005962.



## CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO

LOCATION: Delaware Creek Watershed above County road bridge East of Anadarko in Caddo County, Okla.: tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 29, T. 7 N., R. 9 W., lat 35 deg. 03 min., long. 98 deg. 10 min., 3 miles East and 1 mile South of Anadarko, Okla., at section line road bridge.

AREA: 25660.00 acres 40.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA				WATERSHED 131 NEAR ANADARKO							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
P	1.04	1.56	0.13	0.37	5.14	2.37	2.26	4.51	5.31	4.63	0.75	2.85	30.92				
1971 Q	0.015	0.022	0.021	0.011	0.078	0.094	0.002	0.016	0.018	0.153	0.036	0.122	0.586				
STA AV P	0.78	1.16	1.40	2.64	4.02	2.76	1.93	2.67	4.17	2.00	2.02	1.01	26.56				
Q	0.047	0.058	0.073	0.103	0.146	0.039	0.004	0.004	0.014	0.023	0.028	0.043	0.582				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971 6-1	0.023	5-31	0.023	5-31	0.045	5-31	0.112	5-31	0.138	5-31	0.147	5-31	0.153	5-30	0.160		
MAXIMUMS FOR PERIOD OF RECORD																	
5-9	0.028	5-9	0.028	5-9	0.054	5-31	0.112	5-6	0.147	5-6	0.173	5-4	0.234	5-4	0.333		
1968		1968		1968		1971		1969		1969		1969		1969			

NOTES: Watershed conditions: from a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 15%; row crop - 5%; alfalfa - 2%; pasture and range - 67%; and miscellaneous - 11%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.11-4 (topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Aug. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

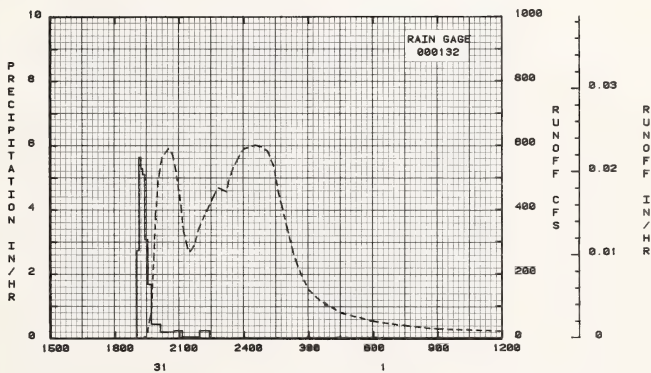
1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.23	0.0	0.0	0.0	0.0	0.07	
2	0.09	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	2.78	0.0	0.63		
3	0.95	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.01	0.0	0.13		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.08	0.0	0.0	1.50	0.0	0.05	0.0	0.29		
9	0.0	0.0	0.0	0.0	0.73	0.49	0.0	0.0	0.0	0.0	0.0	0.14		
10	0.0	0.0	0.0	0.0	0.01	0.29	0.0	0.02	0.0	0.0	0.0	0.13		
11	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.11	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.22	0.0	0.0	0.0	1.11		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.01		
16	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.07	0.0	0.0	0.06	0.0	1.16	0.01	0.11	0.0		
18	0.0	0.32	0.0	0.0	0.10	0.0	0.0	0.0	1.68	0.46	0.0	0.0		
19	0.0	0.0	0.0	0.11	0.0	0.0	0.05	0.0	0.05	0.33	0.0	0.0		
20	0.0	0.01	0.0	0.04	0.0	0.45	0.0	0.0	0.0	0.06	0.0	0.0		
21	0.0	1.17	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.03	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.56		
23	0.0	0.0	0.0	0.0	0.58	0.0	0.86	0.0	0.27	0.0	0.02	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	1.98	0.0	0.0	0.0		
25	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.70	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.01	0.0	0.02	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.01	0.02	0.0	0.0	0.42	0.0	0.18	0.0	0.20		
30	0.0	0.0	0.0	0.0	0.47	0.14	0.0	0.0	0.0	0.05	0.06	0.0		
31	0.0	0.0	0.0	0.0	2.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	1.04	1.56	0.13	0.37	5.14	2.37	2.26	4.51	5.31	4.63	0.75	2.85		
STA AV	0.78	1.16	1.40	2.64	4.02	2.76	1.93	2.67	4.17	2.00	2.02	1.81		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.



1971	SELECTED RUMOFF EVENT					CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ABADARKO									
ANTECEDENT CONDITIONS						RAINFALL					RUMOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(Inches)	(Inches)	Mo-Day	of Day	(In/hr)	(Inches)	Mo-Day	of Day	(cfs)	(Inches)	Mo-Day	of Day	(cfs)	(Inches)	
EVENT OF MAY 31 - 5 7															
							6- 1	11	594.340	0.0787					
								30	601.510	0.0860					
								48	595.770	0.0929					
								106	581.465	0.0997					
								123	538.840	0.1058					
								136	456.240	0.1099					
								148	399.219	0.1132					
								200	342.198	0.1161					
								218	261.219	0.1196					
								230	223.160	0.1215					
								241	192.490	0.1230					
								300	150.220	0.1251					
								330	117.070	0.1277					
								430	77.300	0.1315					
								600	51.280	0.1352					
								730	37.130	0.1378					
								900	27.670	0.1397					
								1200	20.200	0.1425					
								1500	15.640	0.1446					
								1900	11.200	0.1467					
								2400	8.250	0.1486					
							6- 2	1200	5.280	0.1517					
								2400	4.100	0.1539					
							6- 3	1200	2.920	0.1555					
								2400	2.400	0.1567					
							6- 4	1200	1.880	0.1577					
								2400	1.555	0.1585					
							6- 5	1200	1.230	0.1591					
								2400	1.025	0.1596					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00003665.



## CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA

LOCATION: Line Creek Watershed above U.S. Highway 81 bridge at Chickasha, Grady and Caddo Counties, Okla.; tributary to Washita River; Red River Basin. GAGING STATION—WB1/4 sec. 29, T. 7 N., E. 7 W., lat. 35 deg. 03 min., long. 97 deg. 58 min., Northwest edge of Chickasha, Okla., at U.S. Highway 81 Bridge.

AREA: 33300.00 acres 52.00 sq. miles

MONTHLY PRECIPITATION AND RUFOFF (inches)										CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
	P	0.69	1.78	0.09	0.41	4.70	2.98	2.49	3.65	5.00	4.18	0.56	2.85	29.38											
1971	Q	0.000	0.005	0.000	0.000	0.014	0.170	0.026	0.022	0.034	0.601	0.013	0.020	0.904											
STA AV	P	0.68	1.12	1.35	2.56	3.60	2.78	1.84	2.70	4.05	1.73	1.91	1.00	25.33											
	Q	0.003	0.004	0.005	0.056	0.077	0.040	0.012	0.042	0.030	0.066	0.027	0.006	0.368											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUFOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge													Maximum Volume for Selected Time Interval												
Date Rate													Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.												
Date Rate													Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.												
1971	10-3	0.036	10-3	0.035	10-3	0.068	10-3	0.170	10-3	0.301	10-3	0.463	10-2	0.552	10-2	0.575									
MAXIMUMS FOR PERIOD OF RECORD																									
8-28 0.060 8-28 0.053 8-28 0.096 8-28 0.204 10-3 0.301 10-3 0.463 10-2 0.552 10-2 0.575													1965 1965 1965 1965 1971 1971 1971 1971 1971 1971 1971												

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 30%; row crop - 24; alfalfa - 9%; pasture and range - 48%; and miscellaneous - 11%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.12-4 (topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 13 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Sept. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec										
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.02	0.0										
2	0.07	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.72	0.0	0.05										
3	0.62	0.0	0.0	0.0	0.0	0.01	0.37	0.0	0.0	0.0	0.03	0.0	0.08										
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0										
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09										
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0										
7	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0										
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	1.18	0.0	0.04	0.0	0.48										
9	0.0	0.0	0.0	0.0	0.0	0.67	0.47	0.0	0.0	0.0	0.0	0.0	0.14										
10	0.0	0.0	0.0	0.0	0.0	0.01	0.23	0.0	0.01	0.0	0.0	0.0	0.15										
11	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0										
12	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.12	0.0	0.0	0.0	0.0										
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0										
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.74	0.0	0.0	0.0	1.04										
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0										
16	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
17	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.25	0.01	0.03	0.0										
18	0.0	0.52	0.0	0.0	0.0	0.07	0.0	0.0	1.56	0.35	0.0	0.0	0.0										
19	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.03	0.0	0.06	0.37	0.0	0.0										
20	0.0	0.01	0.0	0.0	0.03	0.0	0.67	0.0	0.0	0.0	0.07	0.0	0.0										
21	0.0	1.20	0.0	0.0	0.0	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0										
22	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.14	0.0	0.0	0.0	0.44	0.0										
23	0.0	0.0	0.0	0.0	0.0	0.52	0.0	1.08	0.0	0.35	0.0	0.02	0.0										
24	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.77	0.0	0.0	0.0										
25	0.0	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
26	0.0	0.0	0.0	0.0	0.01	0.59	0.0	0.0	0.0	0.0	0.51	0.0	0.0										
27	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
28	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.96	0.06	0.0	0.0	0.0	0.0										
29	0.0	0.0	0.0	0.0	0.02	0.03	0.0	0.27	0.0	0.0	0.06	0.0	0.22										
30	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.02	0.05	0.0										
31	0.0		0.0			2.23		0.0	0.0		0.0		0.0										
TOTAL	0.69	1.78	0.09	0.41	4.70	2.98	2.49	3.65	5.00	4.18	0.56	2.85											
STA AV	0.68	1.12	1.35	2.56	3.60	2.78	1.84	2.70	4.05	1.73	1.91	1.00											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 13 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

1971					CHICKASHA, OKLAHOMA				WATERSHED #11 AT CHICKASHA			
MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	82.88	2.91	0.0	0.0	0.94	0.87	0.26
2	0.0	0.0	0.02	0.0	0.0	28.45	2.49	0.0	0.0	9.89	0.79	0.44
3	0.49	0.0	0.0	0.0	0.0	33.82	2.41	0.0	0.0	646.85	0.78	0.92
4	0.0	0.0	0.0	0.0	0.0	17.82	2.31	0.0	0.0	123.70	0.78	0.44
5	0.0	0.0	0.0	0.0	0.0	3.12	2.19	0.0	0.0	13.66	0.77	0.39
6	0.0	0.0	0.0	0.0	0.0	3.77	2.01	0.01	0.0	5.34	0.73	0.27
7	0.0	0.0	0.0	0.0	0.0	5.45	1.89	0.0	0.0	2.92	0.69	0.25
8	0.0	0.0	0.0	0.0	0.0	3.67	1.73	6.19	0.0	2.17	0.69	2.32
9	0.0	0.0	0.0	0.0	1.41	3.81	1.61	2.15	0.0	1.91	0.72	1.56
10	0.0	0.0	0.0	0.0	0.18	3.17	1.39	0.92	0.0	1.88	0.68	1.95
11	0.0	0.0	0.0	0.0	0.12	3.18	1.23	0.37	0.0	1.89	0.64	0.78
12	0.0	0.0	0.0	0.0	0.10	3.24	2.84	0.16	0.0	1.91	0.64	0.50
13	0.0	0.0	0.0	0.0	0.17	2.48	3.73	1.01	0.0	1.77	0.63	0.36
14	0.0	0.0	0.0	0.0	0.94	1.70	1.91	2.88	0.0	1.61	0.60	2.99
15	0.0	0.0	0.0	0.0	0.46	1.82	0.81	0.28	0.0	1.52	0.56	1.95
16	0.0	0.0	0.0	0.07	0.23	1.47	0.33	4.55	0.0	1.45	0.56	1.06
17	0.0	0.0	0.0	0.0	0.10	1.38	0.14	2.04	1.98	1.38	0.56	0.94
18	0.0	1.62	0.0	0.0	0.05	1.30	0.03	0.90	5.39	2.01	0.56	0.92
19	0.00	0.00	0.44	0.01	1.16	0.39	0.01	0.39	3.23	2.39	0.52	0.87
20	0.0	0.0	0.0	0.04	0.00	4.22	0.00	0.16	2.09	1.93	0.51	0.79
21	0.0	5.10	0.0	0.0	0.0	11.84	0.0	0.07	1.10	1.36	0.54	0.78
22	0.0	0.17	0.0	0.0	0.0	1.99	0.0	0.03	0.57	1.30	0.82	0.78
23	0.0	0.01	0.0	0.0	0.80	1.90	1.30	0.01	0.37	1.25	0.53	0.77
24	0.0	0.00	0.0	0.0	0.0	1.82	0.00	0.01	9.25	1.24	0.43	0.73
25	0.0	0.0	0.03	0.0	0.0	1.81	0.0	0.00	13.92	1.22	0.42	0.68
26	0.0	0.0	0.0	0.0	2.02	1.80	0.0	0.0	5.23	2.25	0.39	0.64
27	0.0	0.0	0.0	0.0	1.03	1.72	0.0	0.11	5.33	1.31	0.33	0.61
28	0.0	0.0	0.0	0.0	0.16	1.70	3.57	0.0	1.04	1.05	0.30	0.60
29	0.0	0.0	0.0	0.0	0.08	2.13	0.02	0.0	1.03	0.99	0.26	1.02
30	0.0	0.0	0.0	0.0	0.43	2.72	0.01	0.0	1.03	0.94	0.25	0.56
31	0.0	0.0	0.0	0.0	11.02	0.00	0.00	0.0	0.0	0.92	0.0	0.25
MEAN	0.016	0.247	0.002	0.019	0.623	7.551	1.189	0.973	1.592	27.127	0.585	0.883
INCHES	0.000	0.005	0.000	0.0018	0.016	0.026	0.022	0.034	0.601	0.018	0.018	0.020
STA AV	0.003	0.004	0.005	0.056	0.077	0.040	0.012	0.042	0.030	0.068	0.027	0.006

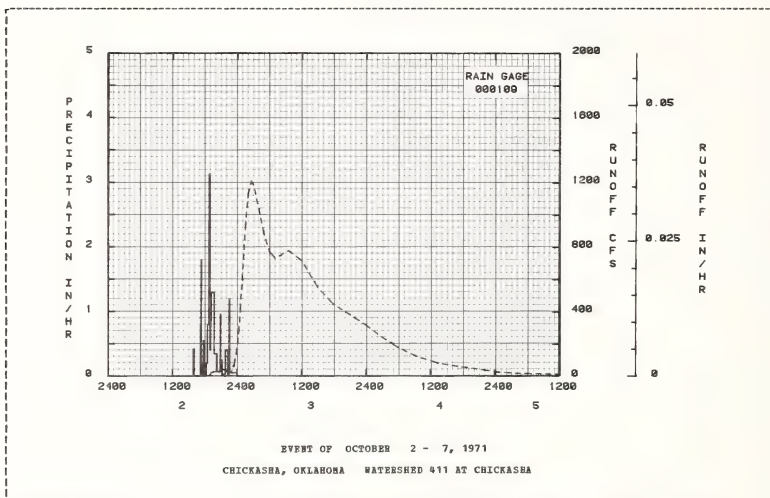
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0007148. To convert discharge in inches to AC-FT, multiply by 2.775. STA AV based on 10 yr (1962-71) record period.

1971 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED #11 AT CHICKASHA											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Date	Time	Acc.
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	No-Day	of Day	(cfs)	No-Day	of Day	(inches)
EVENT OF OCTOBER 2 - 7, 1971											
RG 000109											
10- 2	0.0	0.000	10- 2	1550	0.0	10- 2	1618	0.940	0.0		
				1600	0.4200		1641	1.680	0.0		
				1715	0.0		1723	2.130	0.0		
				1719	0.7500		1736	5.030	0.0		
				1721	1.8004		1800	9.020	0.0001		
WATERSHED CONDITIONS:											
From a revised 1971 survey											
(p. 69.007-1, this publication); sowed crop - 30%;											
row crop - 2%; alfalfa -											
9%; pasture and range -											
48%; miscellaneous - 11%.											
				1844	0.8000		2000	28.080	0.0011		
				1853	3.1331		2041	29.750	0.0017		
				1859	0.7001		2110	42.720	0.0024		
				1905	0.4000		2230	5.960	0.0016		
				1914	0.8667		2248	25.960	0.0038		
				1945	1.2967		2300	30.900	0.0040		
				2016	0.3484		2323	62.140	0.0045		
				2053	0.0649		2341	106.880	0.0052		
				2058	0.9601		2400	174.880	0.0065		
				2115	0.2471		2400	174.880	0.0065		
				2139	0.0250		2400	174.880	0.0065		
				2151	0.0		2400	174.880	0.0065		
				2219	0.4071		2400	174.880	0.0065		
				2233	0.0		2400	174.880	0.0065		
				2237	1.2000		2400	174.880	0.0065		
				10- 3	2	0.0494	2.64	300	1185.080	0.0799	
								400	1035.120	0.1130	
								500	873.658	0.1414	
								600	770.750	0.1659	
								700	731.010	0.1883	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002978.

1971	SELECTED RUNOFF EVENT			CHICKASAW, OKLAHOMA WATERSHED 411 AT CHICKASAW									
PRECEDENT CONDITIONS			RAINFALL				RUNOFF						
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)			
EVENT OF OCTOBER 2 - 7, 1971 (CONTINUED)													
							10- 3	930	776.560	0.2484			
								1200	714.438	0.2999			
								1500	549.350	0.3564			
								1800	443.898	0.4008			
								2200	360.438	0.4487			
								2400	315.500	0.4688			
							10- 4	300	242.670	0.4937			
								600	178.930	0.5125			
								930	121.690	0.5282			
								1330	81.190	0.5403			
								1800	55.670	0.5495			
								2300	35.170	0.5563			
								2400	28.080	0.5572			
							10- 5	100	23.960	0.5580			
								300	19.860	0.5593			
								600	16.290	0.5609			
								1200	12.270	0.5635			
								2400	7.430	0.5670			
							10- 6	1200	5.030	0.5692			
								2400	3.865	0.5708			
							10- 7	1200	2.700	0.5720			
								2400	2.415	0.5729			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002978.



## CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLE

LOCATION: West Bitter Creek Watershed above U.S. Highway 62 bridge, East of Chickasha in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--3W1/4 sec. 29, T. 7 N., R. 6 W., lat. 35 deg. 03 min., long. 97 deg. 51 min., 4 miles East of Chickasha, Okla., at U.S. highway 62 bridge.

AREA: 38020.00 acres 59.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLE												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1	P	0.66	2.01	0.05	0.87	4.14	5.96	2.34	2.49	4.83	5.19	0.46	2.85	31.85											
1971	Q	0.019	0.059	0.020	0.019	0.015	0.857	0.023	0.013	0.152	0.894	0.023	0.155	2.249											
STA AV	P	0.72	1.18	1.64	2.81	3.32	3.17	1.99	3.31	3.97	1.86	1.88	1.09	26.94											
	Q	0.039	0.046	0.080	0.297	0.225	0.218	0.023	0.154	0.194	0.120	0.079	0.057	1.531											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge													Maximum Volume for Selected Time Interval												
Date Rate													Date Vol.												
1 Hour													1 Day												
2 Hours													2 Days												
6 Hours													8 Days												
12 Hours													Date Vol.												
1971	10- 3	0.080	10- 3	0.079	10- 3	0.159	10- 2	0.462	10- 2	0.729	10- 2	0.796	10- 2	0.832	10- 2	0.859									
MAXIMUMS FOR PERIOD OF RECORD																									
	4-12	0.086	4-12	0.086	4-12	0.169	10- 2	0.462	10- 2	0.729	10- 2	0.796	10- 2	0.832	4- 9	0.896									
	1967	1967	1967	1967	1967	1971	1971	1971	1971	1971	1971	1971	1971	1967											

NOTES: Watershed conditions: From a revised 1971 survey (69.007-1, this publication); sowed crop - 22%; row crop - 3%; alfalfa - 5%; pasture and range - 61%; and miscellaneous - 9%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965; USDA Misc. Pub. 1216, p. 69.13-11 (Topography) and p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began Oct. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971					DAILY PRECIPITATION (Inches)					CHICKASHA, OKLAHOMA					WATERSHED 511 NEAR TABLE										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.75	0.0	0.0	0.03	0.04													
2	0.08	0.0	0.0	0.03	0.0	0.0	0.89	0.0	0.0	0.0	3.51	0.0	0.51												
3	0.58	0.0	0.0	0.0	0.0	0.02	1.16	0.0	0.0	0.04	0.0	0.09													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.11	0.0	0.0													
7	0.01	0.0	0.0	0.0	0.0	1.79	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.66	0.0	0.08	0.01	0.57													
9	0.0	0.0	0.0	0.0	0.62	0.28	0.14	0.0	0.0	0.0	0.0	0.09													
10	0.0	0.0	0.0	0.0	0.02	0.29	0.0	0.0	0.0	0.0	0.0	0.18													
11	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.15	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.25	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.13	0.0	0.0	0.0	0.97													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.01													
16	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.11	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	1.26	0.02	0.04	0.0													
18	0.0	0.53	0.0	0.0	0.0	0.08	0.0	0.0	1.40	0.29	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.07	0.49	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.05	0.0	0.45	0.0	0.0	0.0	0.08	0.0													
21	0.0	1.39	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.39	0.0	0.22	0.0	0.04													
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	1.76	0.0	0.0	0.0													
25	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.42	1.08	0.0	0.0	0.0	0.62	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.94	0.03	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.07	0.0	0.05	0.0	0.01	0.0	0.02	0.0	0.26													
30	0.0	0.0	0.0	0.0	0.24	0.17	0.0	0.0	0.0	0.04	0.04	0.0													
31	0.0	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.66	2.01	0.05	0.87	4.14	5.96	2.34	2.49	4.83	5.19	0.46	2.85													
STA AV	0.72	1.18	1.64	2.81	3.32	3.17	1.99	3.31	3.97	1.86	1.88	1.09													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 15 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLES	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.76	0.76	1.81	0.59	0.81	113.01	3.10	0.02	0.0	0.18	1.0	1.28	
2	1.11	0.75	1.54	0.55	0.60	5.03	25.53	0.00	0.0	325.27	1.08	1.77	
3	1.74	0.78	1.50	0.58	0.47	491.05	3.47	0.0	0.0	968.32	1.06	2.77	
4	1.14	0.98	1.55	0.60	0.44	36.91	1.01	0.0	0.0	42.97	1.02	2.79	
5	0.79	1.06	1.48	0.63	0.38	10.53	0.48	0.0	11.0	14.11	1.06	2.46	
6	0.75	1.03	1.37	0.64	0.33	4.61	0.21	0.0	0.0	7.70	1.05	2.30	
7	0.77	0.79	1.16	0.68	0.27	2.62	0.10	0.0	0.0	5.14	0.96	2.08	
8	0.93	0.76	1.04	0.65	0.23	516.61	0.04	0.0	0.0	3.99	1.01	4.44	
9	1.07	0.86	1.13	0.69	0.52	62.65	0.02	0.0	0.0	6.61	1.13	21.77	
10	1.21	0.94	1.16	0.74	1.13	22.35	0.02	0.0	0.0	3.50	1.16	6.53	
11	1.23	1.04	1.21	0.66	0.78	20.08	0.00	0.0	0.0	2.82	1.23	4.60	
12	1.23	0.98	1.15	0.43	0.43	23.11	0.0	0.0	0.0	2.93	1.30	2.76	
13	1.23	0.78	1.05	0.48	0.24	9.45	0.0	0.0	0.0	2.27	1.31	2.23	
14	1.23	0.75	0.83	0.24	0.21	6.48	0.0	14.16	0.0	2.00	1.31	9.68	
15	1.22	0.75	0.70	0.30	0.17	4.12	0.0	5.19	0.0	1.92	1.34	113.31	
16	1.16	0.75	0.67	0.37	0.15	2.84	0.0	0.90	0.0	1.61	1.48	12.55	
17	1.14	0.76	0.79	0.59	0.13	1.77	0.0	0.38	0.0	1.53	1.19	6.64	
18	1.06	0.82	0.80	0.54	0.10	0.93	0.0	0.16	56.02	1.75	1.06	4.87	
19	0.88	0.81	0.75	0.46	0.08	0.84	0.0	0.05	4.71	2.29	0.96	4.10	
20	0.77	2.27	0.70	0.44	0.05	1.06	0.0	0.02	0.96	4.18	1.05	3.82	
21	0.80	36.64	0.72	0.38	0.03	28.07	0.0	0.00	0.41	3.00	1.07	3.39	
22	0.81	13.95	0.90	0.40	0.03	1.34	0.0	0.0	0.23	1.74	1.13	2.99	
23	0.81	5.86	0.93	0.39	0.06	0.03	0.0	0.0	0.15	1.62	1.52	2.84	
24	0.81	3.44	0.94	0.36	0.07	0.59	0.0	0.0	123.97	1.86	1.64	2.84	
25	0.81	2.92	0.98	0.40	0.02	0.36	0.0	0.0	50.07	1.54	1.57	2.95	
26	0.81	2.41	0.93	0.28	0.56	0.27	0.0	0.0	3.78	2.31	1.48	3.07	
27	0.80	1.80	0.88	13.01	7.05	0.22	0.0	0.0	1.21	7.50	1.38	3.06	
28	0.76	1.44	0.86	2.26	1.48	0.20	2.19	0.0	0.64	3.44	1.25	2.87	
29	0.76	0.80	1.24	0.39	0.25	0.31	0.0	0.0	0.42	1.80	1.23	3.37	
30	0.80	0.80	0.70	1.05	0.19	0.47	0.14	0.0	0.30	1.48	1.23	5.69	
31	0.80	0.64	0.64	0.64	7.18	0.07	0.0	0.0	1.31	2.31	2.31		
MEAN	0.980	3.353	1.009	1.016	0.793	45.621	1.181	0.673	8.096	46.087	1.215	8.004	
INCHES	0.019	0.059	0.020	0.019	0.015	0.857	0.023	0.013	0.152	0.894	0.023	0.155	
STA AV	0.039	0.046	0.080	0.297	0.225	0.218	0.023	0.154	0.194	0.120	0.079	0.057	

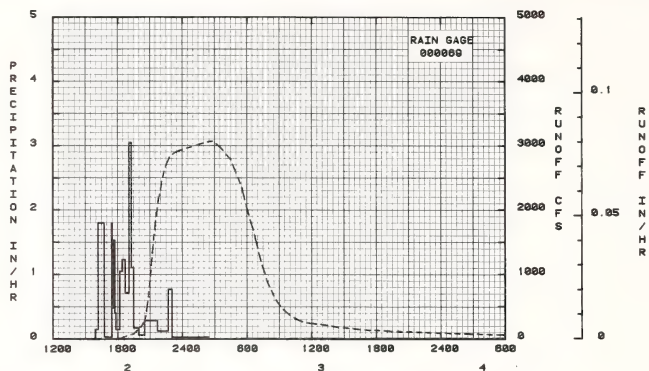
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0006260. To convert discharge in inches to AC-FT, multiply by 3,168. STA AV based on 10 yr (1962-71) record period.

1971 SELECTED RUNOFF EVENT				CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLES									
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF OCTOBER 2 - 8, 1971													
RG 000069													
10- 2	0.0	0.000	10- 2	1555	0.0	0.0	10- 2	1600	0.170	0.0			
				1611	0.1500	0.04		1730	0.150	0.0			
				1644	1.8000	1.03		1800	0.450	0.0			
				1726	0.0286	1.05		1811	2.820	0.0			
				1730	1.7996	1.17		1823	16.870	0.0001			
WATERSHED CONDITIONS:													
From a revised 1971 survey			1735		0.8800	1.21	1848		41.170	0.0004			
(p. 69-007-1, this publication); sowed crop - 22%;			1744		1.5336	1.44	1930		81.400	0.0015			
row crop - 3%; alfalfa -			1750		0.4000	1.48	1948		129.900	0.0023			
5%; pasture and range -			1811		0.1429	1.53	2011		195.330	0.0039			
61%; and miscellaneous -			1823		1.0499	1.74	2023		248.030	0.0051			
9%.			1842		1.2316	2.13	2030		291.500	0.0059			
			1903		0.7143	2.38	2036		357.700	0.0067			
			1915		3.0498	2.99	2041		437.070	0.0075			
			1928		1.1077	3.23	2048		580.110	0.0091			
			1957		0.1655	3.31	2053		729.898	0.0106			
			2029		0.0563	3.34	2100		905.628	0.0131			
			2141		0.2833	3.68	2106		1063.688	0.0156			
			2242		0.1180	3.80	2111		1255.178	0.0181			
			2303		0.7714	4.07	2118		1459.418	0.0222			
			10- 3	228	0.0205	4.14	2123		1623.979	0.0257			
							2130		1755.408	0.0309			
							2136		1918.590	0.0356			
							2141		2030.648	0.0398			
							2148		2168.520	0.0462			
							2200		2325.030	0.0581			
							2206		2443.026	0.0642			
							2218		2597.765	0.0773			
							2230		2705.206	0.0913			
							2248		2820.887	0.1127			
							2318		2895.827	0.1500			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002608.

1971 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA				WATERSEED 511 BEAR TAILER			
ATWECEDEENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF OCTOBER 2 - 8, 1971 (CONTINUED)										
							10- 2	2400	2941.837	0.2035
							10- 3	130	3018.069	0.3201
								230	3068.205	0.3995
								248	3071.559	0.4233
								330	2981.508	0.4788
								430	2778.085	0.5539
								500	2575.865	0.5888
								523	2412.539	0.6137
								536	2295.158	0.6269
								548	2159.800	0.6385
								600	2022.188	0.6496
								611	1915.820	0.6588
								623	1795.648	0.6686
								636	1689.168	0.6784
								648	1549.668	0.6868
								700	1410.229	0.6946
								706	1337.760	0.6981
								718	1208.969	0.7047
								730	1089.938	0.7108
								741	999.229	0.7157
								753	889.388	0.7207
								806	806.090	0.7255
								818	743.010	0.7295
								830	662.188	0.7332
								848	573.330	0.7380
								906	510.550	0.7423
								930	434.050	0.7473
								1000	361.290	0.7525
								1030	309.688	0.7569
								1111	260.148	0.7620
								1200	232.610	0.7673
								1300	214.200	0.7731
								1430	173.630	0.7807
								1630	139.110	0.7889
								1930	109.090	0.7986
								2400	83.360	0.8099
							10- 4	300	67.590	0.8158
								600	54.540	0.8206
								900	45.840	0.8245
								1200	39.260	0.8279
								1800	26.310	0.8331
								2400	20.470	0.8368
							10- 5	1200	13.360	0.8421
								2400	9.260	0.8456
							10- 6	1200	7.630	0.8482
								2400	6.285	0.8504
							10- 7	1200	4.940	0.8522
								2400	4.400	0.8537
							10- 8	1200	3.860	0.8550
								2400	3.860	0.8562

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002608.



## CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above county road East-Northeast of Anadarko, in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION: 251/4 sec. 19, T. 9 N., R. 9 W., lat. 35 deg. 05 min., long. 98 deg. 19 min., 2-1/2 miles East of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 25020.00 acres 39.10 sq. miles

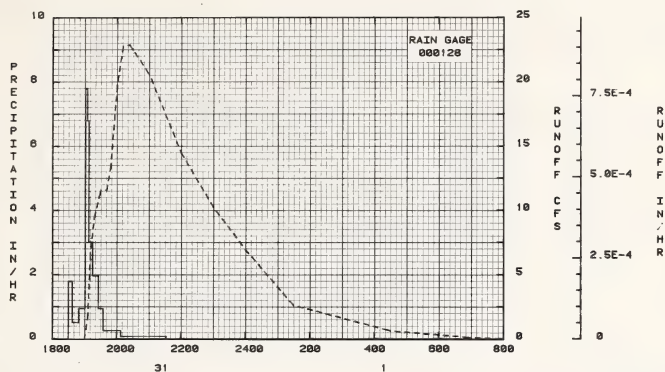
MONTHLY PRECIPITATION AND RUNOFF (inches)												CHICKASHA, OKLAHOMA		WATERSHED 110 NEAR ANADARKO	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1971 P	0.94	1.31	0.05	0.42	5.15	2.71	2.06	5.40	4.77	4.29	0.69	2.60	30.39		
Q	0.0	0.0	0.0	0.0	0.003	0.001	0.0	0.000	0.001	0.004	0.0	0.001	0.010		
STA AV P	0.65	1.05	1.33	2.53	3.70	2.98	1.82	2.75	4.04	1.78	1.81	0.92	25.35		
Q	0.0	0.002	0.004	0.024	0.061	0.005	0.0	0.001	0.000	0.000	0.003	0.000	0.099		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971 5-31	0.001	5-31	0.001	5-31	0.002	5-31	0.003	5-31	0.003	5-31	0.003	5-30	0.003	5-24	0.003
MAXIMUMS FOR PERIOD OF RECORD															
5-11	0.004	5-11	0.004	5-11	0.007	5-11	0.021	5-11	0.038	5-6	0.070	5-6	0.127	5-4	0.278
1964		1964		1964		1964		1964		1969		1969		1969	

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 30%; row crop - 5%; alfalfa - 11%; pasture and range - 29%; and miscellaneous - 25%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.10-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA		WATERSHED 110 NEAR ANADARKO	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.02	0.0	0.14	0.0	0.0	0.0	0.0	0.0		0.0	0.06
2	0.12	0.0	0.05	0.0	0.0	0.0	0.02	0.0	0.0	1.68	0.0	0.0		0.0	0.54
3	0.82	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.11
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.17
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
7	0.0	0.0	0.0	0.0	0.06	0.0	0.06	0.0	0.0	0.0	0.0	0.0		0.0	0.0
8	0.0	0.0	0.0	0.0	0.04	0.0	0.0	1.57	0.0	0.03	0.0	0.0		0.0	0.16
9	0.0	0.0	0.0	0.0	0.73	0.55	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.11
10	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.02	0.0	0.0	0.0	0.0		0.0	0.13
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.10	0.0	0.0	0.0	0.0		0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0		0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0		0.0	1.11
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0		0.0	0.01
16	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
17	0.0	0.0	0.0	0.07	0.0	0.0	0.18	0.0	1.10	0.10	0.03	0.0		0.0	0.0
18	0.0	0.26	0.0	0.0	0.10	0.0	0.0	0.9	1.81	0.66	0.0	0.0		0.0	0.0
19	0.0	0.0	0.0	0.22	0.0	0.0	0.01	0.0	0.04	0.22	0.0	0.0		0.0	0.0
20	0.0	0.02	0.0	0.02	0.0	0.37	0.0	0.0	0.0	0.03	0.0	0.0		0.0	0.0
21	0.0	0.98	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
22	0.0	0.0	0.0	0.02	0.0	0.0	0.19	0.03	0.0	0.0	0.57	0.0		0.0	0.0
23	0.0	0.0	0.0	0.0	0.45	0.0	0.40	0.0	0.18	0.0	0.02	0.0		0.0	0.0
24	0.0	0.03	0.0	0.0	0.0	0.0	0.02	1.71	0.0	0.0	0.0	0.0		0.0	0.20
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
26	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0	1.18	0.0	0.0		0.0	0.0
27	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
28	0.0	0.02	0.0	0.04	0.0	0.0	1.12	0.0	0.0	0.0	0.0	0.0		0.0	0.0
29	0.0	0.0	0.02	0.01	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0		0.0	0.20
30	0.0	0.0	0.0	0.48	0.36	0.0	0.0	0.0	0.0	0.09	0.07	0.0		0.0	0.0
31	0.0	0.0	0.0	0.0	2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
TOTAL	0.94	1.31	0.05	0.42	5.15	2.71	2.06	5.40	4.77	4.29	0.69	2.60			
STA AV	0.65	1.05	1.33	2.53	3.70	2.98	1.82	2.75	4.04	1.78	1.81	0.92			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.





EVEBT OF MAY 31 - 1 7  
 CHICKASAW, OKLAHOMA WATERSHED 110 NEAR ANADARKO

## CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH

LOCATION: Little Washita River Watershed above U.S. highway 81 bridge South of Chickasha in Grady and Caddo Counties, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SR1/4 sec. 32, T. 6 N., R. 7 W., lat. 34 deg. 57 min., long. 97 deg. 57 min., 5-1/2 miles South of Chickasha, Okla., at U.S. highway 81 bridge.

AREA: 132990.00 acres 207.80 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA				WATERSHED 522 NEAR MINNEKAH						
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971	P	0.49	1.74	0.07	0.81	4.90	2.59	2.41	4.77	5.42	5.03	0.68	2.79	31.30			
	Q	0.047	0.062	0.044	0.025	0.037	0.138	0.010	0.101	0.106	0.432	0.050	0.112	1.163			
STA AV	P	0.82	1.23	1.52	2.51	3.98	2.72	1.88	2.63	4.29	2.09	1.93	1.02	26.61			
	Q	0.067	0.075	0.096	0.138	0.242	0.131	0.030	0.049	0.073	0.083	0.087	0.062	1.133			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971		10- 3	0.029	10- 3	0.029	10- 3	0.057	10- 3	0.149	10- 2	0.250	10- 2	0.299	10- 2	0.333	10- 2	0.378
MAXIMUMS FOR PERIOD OF RECORD																	
		5-10	0.056	5-10	0.055	5-10	0.108	5- 9	0.253	5- 9	0.316	5- 9	0.365	5- 9	0.476	5- 3	0.536
		1964		1964		1964		1964		1964		1964		1964		1969	

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 15%; row crop - 15; alfalfa - 3%; pasture and range - 65%; and miscellaneous - 16%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.15-4 (topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation Data obtained from a Thiessen weighted average of 36 gages on the watershed. Precipitation records began Oct. 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

		1971 DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA					WATERSHED 522 NEAR MINNEKAH				
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.01	0.05			
2	0.04	0.0	0.07	0.0	0.0	0.0	0.0	0.02	0.0	0.0	3.21	0.0	0.61			
3	0.45	0.0	0.0	0.0	0.0	0.01	0.06	0.0	0.0	0.0	0.11	0.0	0.07			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0			
7	0.0	0.01	0.0	0.0	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.99	0.0	0.10	0.0	0.0	0.43			
9	0.0	0.0	0.0	0.0	0.0	0.73	0.48	0.01	0.0	0.0	0.0	0.0	0.17			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.12	0.0	0.0	0.0	0.16			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.04	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.19	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.46	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29	0.0	0.0	0.55	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.01	0.0	1.38	0.04	0.06	0.0			
18	0.0	0.45	0.0	0.0	0.0	0.10	0.0	0.0	0.0	1.80	0.33	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0			
20	0.0	0.02	0.0	0.0	0.03	0.0	0.55	0.0	0.0	0.0	0.07	0.0	0.0			
21	0.0	1.19	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.27	0.0	0.02	0.0	0.51	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.67	0.0	1.20	0.03	0.28	0.0	0.01	0.0			
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.04	1.78	0.0	0.0	0.0			
25	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.03	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.01	0.58	0.0	0.01	0.0	0.0	0.53	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.75	0.01	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.02	0.03	0.0	0.0	0.0	0.26	0.0	0.06	0.0	0.28			
30	0.0	0.0	0.0	0.0	0.43	0.03	0.0	0.0	0.0	0.0	0.03	0.09	0.0			
31	0.0	0.0	0.0	0.0	2.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL		0.49	1.74	0.07	0.81	4.90	2.59	2.41	4.77	5.42	5.03	0.68	2.79			
STA AV		0.82	1.23	1.52	2.51	3.98	2.72	1.88	2.63	4.29	2.09	1.93	1.02			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 36 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

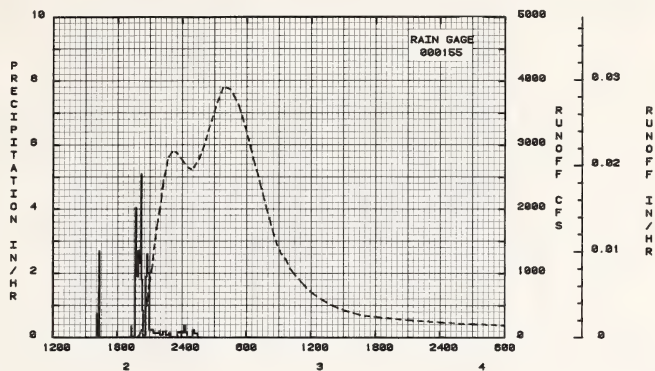
1971 MEAN DAILY DISCHARGE (cfs)													CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.6	8.0	9.2	6.1	2.2	530.4	0.7	1.7	3.3	5.0	12.8	7.8	1	7.6	8.0	9.2	6.1	2.2	530.4	0.7	1.7	3.3	5.0	12.8	7.8
2	7.9	7.4	8.6	5.7	4.9	34.8	0.7	1.0	3.0	304.2	14.1	9.8	2	7.9	7.4	8.6	5.7	4.9	34.8	0.7	1.0	3.0	304.2	14.1	9.8
3	11.3	7.7	7.6	6.0	6.3	19.2	0.4	0.5	2.3	141.4	12.1	12.4	3	11.3	7.7	7.6	6.0	6.3	19.2	0.4	0.5	2.3	141.4	12.1	12.4
4	9.8	8.7	12.7	6.4	3.3	13.3	0.1	0.2	1.6	172.7	10.8	14.5	4	9.8	8.7	12.7	6.4	3.3	13.3	0.1	0.2	1.6	172.7	10.8	14.5
5	7.9	8.7	13.0	7.1	2.7	9.3	0.0	0.0	1.2	92.6	9.6	14.9	5	7.9	8.7	13.0	7.1	2.7	9.3	0.0	0.0	1.2	92.6	9.6	14.9
6	7.6	7.3	11.3	6.8	2.1	5.9	0.0	0.1	1.0	52.3	8.3	15.3	6	7.6	7.3	11.3	6.8	2.1	5.9	0.0	0.1	1.0	52.3	8.3	15.3
7	7.6	6.1	9.9	6.3	1.6	4.3	0.0	0.2	0.6	36.4	7.4	14.8	7	7.6	6.1	9.9	6.3	1.6	4.3	0.0	0.2	0.6	36.4	7.4	14.8
8	7.6	5.5	9.4	5.0	1.4	3.3	0.0	0.4	0.4	26.4	8.1	15.8	8	7.6	5.5	9.4	5.0	1.4	3.3	0.0	0.4	0.4	26.4	8.1	15.8
9	8.4	7.1	9.8	4.0	4.1	10.9	0.0	21.8	0.5	21.4	8.1	24.6	9	8.4	7.1	9.8	4.0	4.1	10.9	0.0	21.8	0.5	21.4	8.1	24.6
10	13.4	14.3	10.0	3.9	22.0	12.1	0.0	4.2	0.5	18.1	7.5	23.9	10	13.4	14.3	10.0	3.9	22.0	12.1	0.0	4.2	0.5	18.1	7.5	23.9
11	16.3	12.7	9.1	3.6	9.7	6.1	0.0	1.3	0.5	15.4	6.5	19.9	11	16.3	12.7	9.1	3.6	9.7	6.1	0.0	1.3	0.5	15.4	6.5	19.9
12	11.5	9.9	8.9	3.6	5.3	35.3	0.0	0.9	0.4	12.8	8.7	15.8	12	11.5	9.9	8.9	3.6	5.3	35.3	0.0	0.9	0.4	12.8	8.7	15.8
13	10.2	8.2	8.7	3.8	4.0	15.8	0.0	2.1	0.9	11.9	8.7	13.8	13	10.2	8.2	8.7	3.8	4.0	15.8	0.0	2.1	0.9	11.9	8.7	13.8
14	9.7	7.6	7.7	3.6	3.5	6.3	0.0	337.9	0.1	11.2	8.4	21.7	14	9.7	7.6	7.7	3.6	3.5	6.3	0.0	337.9	0.1	11.2	8.4	21.7
15	8.5	7.6	7.3	3.5	2.5	3.3	0.0	74.8	0.1	10.6	9.1	120.4	15	8.5	7.6	7.3	3.5	2.5	3.3	0.0	74.8	0.1	10.6	9.1	120.4
16	7.7	7.3	7.4	4.8	1.6	2.1	0.0	24.7	0.1	11.5	9.3	33.6	16	7.7	7.3	7.4	4.8	1.6	2.1	0.0	24.7	0.1	11.5	9.3	33.6
17	7.6	7.2	6.8	6.7	0.9	1.4	0.0	12.8	2.2	10.4	10.1	21.9	17	7.6	7.2	6.8	6.7	0.9	1.4	0.0	12.8	2.2	10.4	10.1	21.9
18	7.6	12.0	5.8	6.1	1.0	1.2	0.0	8.2	172.4	10.1	10.3	19.0	18	7.6	12.0	5.8	6.1	1.0	1.2	0.0	8.2	172.4	10.1	10.3	19.0
19	7.3	17.9	5.6	6.1	1.1	0.8	0.0	6.2	25.9	12.7	10.6	19.1	19	7.3	17.9	5.6	6.1	1.1	0.8	0.0	6.2	25.9	12.7	10.6	19.1
20	7.3	12.3	5.6	6.9	0.8	0.8	0.0	5.4	9.9	15.6	9.8	18.6	20	7.3	12.3	5.6	6.9	0.8	0.8	0.0	5.4	9.9	15.6	9.8	18.6
21	7.5	47.2	5.4	6.3	0.4	20.5	0.0	5.2	6.0	12.7	9.7	18.0	21	7.5	47.2	5.4	6.3	0.4	20.5	0.0	5.2	6.0	12.7	9.7	18.0
22	7.3	36.8	5.7	4.7	0.4	14.8	0.0	4.3	5.3	10.4	9.7	17.3	22	7.3	36.8	5.7	4.7	0.4	14.8	0.0	4.3	5.3	10.4	9.7	17.3
23	7.1	19.8	6.6	3.6	4.9	7.4	0.0	3.4	4.9	9.7	9.8	16.7	23	7.1	19.8	6.6	3.6	4.9	7.4	0.0	3.4	4.9	9.7	9.8	16.7
24	6.8	15.0	6.1	2.8	4.3	3.8	12.0	3.2	138.1	9.3	10.1	15.9	24	6.8	15.0	6.1	2.8	4.3	3.8	12.0	3.2	138.1	9.3	10.1	15.9
25	6.4	12.7	6.4	2.3	5.9	2.4	6.1	3.7	165.0	9.8	9.7	14.9	25	6.4	12.7	6.4	2.3	5.9	2.4	6.1	3.7	165.0	9.8	9.7	14.9
26	6.4	10.8	6.4	3.4	1.6	1.6	1.4	4.5	19.3	11.7	9.1	14.7	26	6.4	10.8	6.4	3.4	1.6	1.6	1.4	4.5	19.3	11.7	9.1	14.7
27	6.4	9.4	6.4	2.1	7.1	1.1	0.4	3.0	10.9	18.1	8.3	14.3	27	6.4	9.4	6.4	2.1	7.1	1.1	0.4	3.0	10.9	18.1	8.3	14.3
28	7.0	9.0	6.8	1.1	0.5	0.8	8.5	2.8	7.6	18.4	7.6	14.1	28	7.0	9.0	6.8	1.1	0.5	0.8	8.5	2.8	7.6	18.4	7.6	14.1
29	8.7	6.9	6.8	1.4	0.1	0.8	16.0	4.5	6.1	16.9	6.9	14.8	29	8.7	6.9	6.8	1.4	0.1	0.8	16.0	4.5	6.1	16.9	6.9	14.8
30	9.2	7.9	6.8	2.9	0.1	0.7	5.9	5.5	5.4	16.1	6.9	20.7	30	9.2	7.9	6.8	2.9	0.1	0.7	5.9	5.5	5.4	16.1	6.9	20.7
31	8.8	6.7	6.7		100.0		3.0	3.9		15.5		8.8	31	8.8	6.7	6.7		100.0		3.0	3.9		15.5		8.8
MEAN	8.522	12.290	7.805	4.563	6.668	25.677	1.783	10.116	19.823	77.069	9.274	20.261	MEAN	8.522	12.290	7.805	4.563	6.668	25.677	1.783	10.116	19.823	77.069	9.274	20.261
INCHES	0.047	0.062	0.044	0.025	0.037	0.138	0.010	0.101	0.106	0.432	0.050	0.112	INCHES	0.047	0.062	0.044	0.025	0.037	0.138	0.010	0.101	0.106	0.432	0.050	0.112
STA AV	0.067	0.075	0.096	0.138	0.242	0.131	0.030	0.049	0.073	0.083	0.087	0.062	STA AV	0.067	0.075	0.096	0.138	0.242	0.131	0.030	0.049	0.073	0.083	0.087	0.062

NOTES: To convert mean daily discharge in CFS to IY/DAY, multiply by 0.0001790. To convert discharge in inches to AC-FT, multiply by 11,083. Yearly mean discharge, 10.7 CFS. STA AV based on 9 yr (1963-71) record period.

1971 SELECTED RUNOFF EVENT												CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH											
PRECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF OCTOBER 2 - 10, 1971																							
RG 000155						RG 000155																	
10- 2	0.0	0.001	10- 2	1605	0.0	0.0	10- 2	1911	5.000	0.0		10- 2	1911	5.000	0.0								
				1609	0.7500	0.05		1936	17.400	0.0			1936	17.400	0.0								
				1614	0.0	0.05		2000	17.500	0.0001			2000	17.500	0.0001								
				1617	0.6000	0.08		2006	37.700	0.0001			2006	37.700	0.0001								
				1619	1.4957	0.13		2011	63.800	0.0001			2011	63.800	0.0001								
WATERSHED CONDITIONS:						WATERSHED CONDITIONS:						WATERSHED CONDITIONS:											
From a revised 1971 survey						From a revised 1971 survey						From a revised 1971 survey											
(p. 69, 007-1, this publication); sowed crop - 15%;						(p. 69, 007-1, this publication); sowed crop - 15%;						(p. 69, 007-1, this publication); sowed crop - 15%;											
row crop - 1%; alfalfa - 3%;						row crop - 1%; alfalfa - 3%;						row crop - 1%; alfalfa - 3%;											
pasture and range - 65%;						pasture and range - 65%;						pasture and range - 65%;											
miscellaneous - 16%.						miscellaneous - 16%.						miscellaneous - 16%.											
				1621	2.7007	0.22		2018	117.000	0.0002			2018	117.000	0.0002								
				1624	0.4000	0.24		2023	200.100	0.0003			2023	200.100	0.0003								
				1919	0.0	0.24		2030	257.400	0.0005			2030	257.400	0.0005								
				1924	0.3600	0.27		2036	326.198	0.0007			2036	326.198	0.0007								
				1942	0.0	0.27		2041	421.198	0.0009			2041	421.198	0.0009								
				1946	4.0501	0.54		2048	545.398	0.0013			2048	545.398	0.0013								
				1958	1.9000	0.92		2053	682.898	0.0017			2053	682.898	0.0017								
				2004	2.6998	1.19		2100	815.198	0.0024			2100	815.198	0.0024								
				2012	2.3250	1.50		2106	938.198	0.0030			2106	938.198	0.0030								
				2016	5.1001	1.84		2111	1032.800	0.0036			2111	1032.800	0.0036								
				2021	1.8001	1.99		2118	1133.198	0.0045			2118	1133.198	0.0045								
				2026	0.0401	2.06		2123	1296.000	0.0053			2123	1296.000	0.0053								
				2040	0.0429	2.07		2130	1453.100	0.0065			2130	1453.100	0.0065								
				2046	1.8999	2.26		2136	1608.398	0.0076			2136	1608.398	0.0076								
				2052	2.6002	2.52		2141	1717.698	0.0086			2141	1717.698	0.0086								
				2101	1.9999	2.82		2148	1846.500	0.0102			2148	1846.500	0.0102								
				2124	0.2348	2.91		2153	1932.600	0.0114			2153	1932.600	0.0114								
				2156	0.1313	2.90		2200	2032.898	0.0131			2200	2032.898	0.0131								
				2202	0.0030	3.00		2206	2171.158	0.0146			2206	2171.158	0.0146								
				2217	0.0800	3.02		2211	2321.799	0.0160			2211	2321.799	0.0160								
				2233	0.1875	3.07		2218	2454.999	0.0181			2218	2454.999	0.0181								
				2252	0.0632	3.09		2230	2604.999	0.0219			2230	2604.999	0.0219								
				2300	0.1500	3.11		2241	2768.998	0.0255			2241	2768.998	0.0255								
				2319	0.0	3.11		2248	2821.499	0.0279			2248	2821.499	0.0279								
				2358	0.1579	3.16		2306	2895.898	0.0343			2306	2895.898	0.0343								

1971 SELECTED RUNOFF EVENT				CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH							
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)		Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF OCTOBER 2 - 10, 1971 (CONTINUED)											
10- 3	15	0.1412			3.20			10- 2	2323	2896.698	0.0405
	25	0.3600			3.26				2336	2860.698	0.0451
	33	0.1500			3.28				2400	2768.198	0.0535
	102	0.0			3.28			10- 3	36	2642.398	0.0656
	112	0.2400			3.32				53	2619.398	0.0712
			131						106	2654.498	0.0754
					0.1263	3.36			136	2704.898	0.0855
									206	3008.098	0.0963
									236	3107.299	0.1081
									318	3680.799	0.1263
									348	3897.599	0.1404
									406	3897.198	0.1491
									430	3868.298	0.1607
									448	3770.799	0.1692
									518	3605.398	0.1830
									536	3437.599	0.1909
									600	3211.698	0.2005
									623	2955.599	0.2097
									641	2752.398	0.2160
									706	2510.898	0.2242
									723	2315.598	0.2293
									741	2133.598	0.2342
									800	1938.799	0.2391
									818	1754.298	0.2432
									836	1578.898	0.2469
									853	1429.398	0.2501
									918	1289.398	0.2543
									941	1215.498	0.2579
									1006	1068.198	0.2615
									1036	960.999	0.2653
									1106	863.800	0.2687
									1136	768.799	0.2717
									1211	685.298	0.2749
									1306	581.599	0.2792
									1406	485.300	0.2832
									1506	421.000	0.2866
									1636	345.600	0.2909
									1836	304.000	0.2958
									2106	268.999	0.3011
									2400	233.800	0.3065
								10- 4	300	206.700	0.3114
									600	188.300	0.3158
									1030	173.400	0.3219
									1400	164.600	0.3263
									1930	147.700	0.3327
									2400	131.300	0.3374
								10- 5	600	109.400	0.3428
									1200	90.200	0.3473
									1800	72.300	0.3509
									2400	65.900	0.3540
								10- 6	1200	50.100	0.3592
									2400	43.000	0.3634
								10- 7	1200	35.900	0.3669
									2400	30.750	0.3699
								10- 8	1200	25.600	0.3724
									2400	23.450	0.3746
								10- 9	1200	21.300	0.3766
									2400	19.650	0.3784
								10-10	1200	18.000	0.3801
									2400	16.700	0.3817

NOTES: To convert runoff in cfs to in/hr, multiply by 0.00007457.



EVENT OF OCTOBER 2 - 10, 1971  
CHICKASHA, OKLAHOMA WATERSHED 522 NEAR SINGERMAN

## CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

LOCATION: East Bitter Creek Watershed above U.S. Highway 62 bridge at Tabler, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 27, T. 7 N., R. 6 W., lat. 35 deg. 05 min., long. 97 deg. 50 min., at Tabler, Okla., at U.S. highway 62 bridge.

AREA: 22530.00 acres 35.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971 P	0.58	1.78	0.14	0.72	4.19	5.41	2.55	3.73	5.80	5.69	0.52	3.14	34.25			
Q	0.065	0.086	0.063	0.051	0.068	0.553	0.019	0.072	0.302	0.840	0.098	0.357	2.573			
STA AV P	0.82	1.29	1.58	2.66	3.61	3.37	2.26	3.44	4.36	2.08	1.99	1.15	28.61			
Q	0.088	0.097	0.138	0.275	0.309	0.228	0.075	0.179	0.210	0.153	0.149	0.110	2.011			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	10- 2	0.113	10- 2	0.112	10- 2	0.217	10- 2	0.473	10- 2	0.609	10- 2	0.667	10- 2	0.694	10- 2	0.728
MAXIMUMS FOR PERIOD OF RECORD																
8- 8	0.134	8- 8	0.129	8- 8	0.244	10- 2	0.473	10- 2	0.609	10- 2	0.667	10- 2	0.694	4- 9	0.742	
1965		1965		1965		1971		1971		1971		1971		1967		

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 8% alfalfa - 3%; pasture and range - 81%; and miscellaneous - 8%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.16-8 (Topography and p. 69.7-21 (Composite)). Precipitation records began Oct. 1961; runoff records began Aug. 1963. STA AV (P) values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-71 on the watershed. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

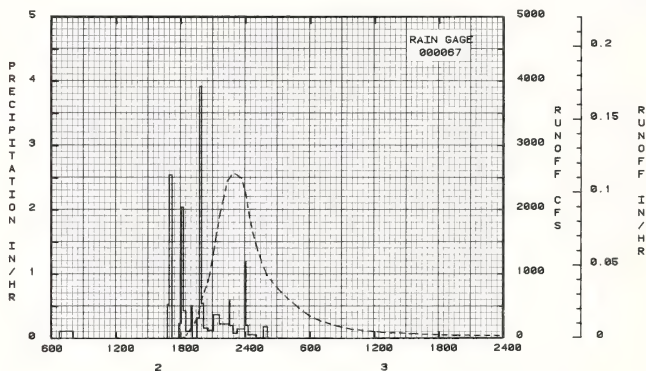
1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.02		
2	0.11	0.0	0.05	0.0	0.0	0.99	0.0	0.0	0.0	3.54	0.0	0.56		
3	0.47	0.0	0.0	0.0	0.02	0.86	0.0	0.0	0.0	0.15	0.0	0.12		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.09	0.0	0.0	0.0		
7	0.0	0.02	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.01	0.01	0.0	0.91	0.0	0.08	0.02	0.86		
9	0.0	0.0	0.0	0.0	0.68	0.23	0.06	0.0	0.0	0.0	0.0	0.14		
10	0.0	0.0	0.0	0.0	0.01	0.38	0.0	0.0	0.0	0.0	0.0	0.21		
11	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.26	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.48	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.75	0.0	0.0	0.0	1.11		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.01		
16	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.40	0.01	0.07	0.0		
18	0.0	0.21	0.0	0.0	0.10	0.0	0.0	0.0	2.02	0.45	0.0	0.0		
19	0.0	0.0	0.0	0.12	0.0	0.0	0.01	0.0	0.09	0.62	0.0	0.0		
20	0.0	0.0	0.0	0.08	0.0	0.81	0.0	0.12	0.0	0.0	0.0	0.0		
21	0.0	1.47	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.04	0.0	0.0	0.14	0.0	0.0	0.0	0.34	0.0		
23	0.0	0.0	0.0	0.0	1.06	0.0	0.62	0.0	0.25	0.0	0.04	0.0		
24	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0		
25	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.09	0.9	0.0	0.0		
26	0.0	0.0	0.0	0.13	0.92	0.0	0.0	0.0	0.0	0.69	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.02	0.0	0.0	0.0	0.01	0.05	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.17	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.33		
30	0.0	0.0	0.0	0.0	0.29	0.01	0.0	0.0	0.0	0.03	0.05	0.0		
31	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.58	1.78	0.14	0.72	4.19	5.41	2.55	3.73	5.80	5.69	0.52	3.14		
STA AV	0.82	1.29	1.58	2.66	3.61	3.37	2.26	3.44	4.36	2.08	1.99	1.15		

NOTES: For daily air temperatures in the vicinity, see table for Watershed #700, (69.007) of this publication. STA AV values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-71 on the watershed. STA AV based on 11 yr for total period of record (1961-71).



1971	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF OCTOBER 2 - 3, 1971 (CONTINUED)										
							10- 3	130	1176.810	0.4663
								200	972.860	0.4900
								300	769.009	0.5283
								400	602.490	0.5585
								500	466.030	0.5820
								600	339.810	0.5997
								700	262.878	0.6130
								830	185.730	0.6278
								1000	130.560	0.6382
								1230	91.760	0.6504
								1600	62.650	0.6623
								1930	43.090	0.6704
								2400	33.170	0.6780
							10- 4	600	24.410	0.6856
								1200	19.360	0.6914
								1800	13.830	0.6958
								2400	10.600	0.6990
							10- 5	1200	8.520	0.7040
								2400	7.350	0.7082
							10- 6	1200	6.180	0.7118
								2400	5.525	0.7149
							10- 7	1200	4.870	0.7176
								2400	4.725	0.7201
							10- 8	1200	4.580	0.7226
								2400	4.300	0.7249

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004402.



EVENT OF OCTOBER 2 - 3, 1971  
CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

## CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER

LOCATION: Winter Creek Watershed above county farm to market road bridge North of Alex in Grady County, Okla., tributary to Washita River; Red River Basin. GAGING STATION—WE1/4 sec. 18, T. 6 N., R. 5 W., lat. 35 deg. 00 min., long. 97 deg. 46 min., 5 miles North and 1 mile East of Alex, Okla., about 1,000 feet downstream from County section line farm to market road bridge over Winter Creek.

AREA: 21310.00 acres 33.30 sq. miles

MONTHLY PRECIPITATION AND RUOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	0.73	1.84	0.17	0.78	3.34	4.59	2.81	3.48	5.29	4.51	0.61	3.72	32.27											
	Q	0.145	0.192	0.110	0.063	0.064	0.413	0.079	0.098	0.277	0.617	0.126	0.660	2.844											
STA AV	P	1.06	1.30	1.46	2.60	3.96	3.08	2.24	3.01	4.66	2.10	1.96	1.21	28.64											
	Q	0.132	0.148	0.161	0.228	0.441	0.217	0.123	0.123	0.340	0.205	0.183	0.172	2.473											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge				Maximum Volume for Selected Time Interval																			
		Date	Rate	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1971		12-14	0.041	12-14	0.037	12-14	0.071	12-14	0.141	12-14	0.174	12-14	0.215	12-14	0.275	12-14	0.433								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-10	0.207	5-10	0.179	5-10	0.269	9-22	0.410	9-22	0.649	9-22	0.791	9-22	0.957	9-22	1.310								
		1964		1964		1964		1970		1970		1970		1970		1970									

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 9%; row crop - 1%; alfalfa - 2%; pasture and range - 77%; and miscellaneous - 11%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.17-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.01	0.0	1.13	0.0	0.0	0.0	0.02	0.03											
2	0.11	0.0	0.07	0.0	0.0	0.0	1.13	0.0	0.0	0.0	2.46	0.0	0.55											
3	0.62	0.0	0.0	0.0	0.0	0.02	0.78	0.0	0.0	0.0	0.29	0.0	0.13											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16											
6	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.47	0.35	0.0	0.0	0.0											
7	0.0	0.01	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.54	0.0	0.08	0.01	0.38											
9	0.0	0.0	0.0	0.0	0.0	0.70	0.22	0.04	0.0	0.10	0.0	0.0	0.34											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.01	0.0	0.0	0.0	0.22											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.72	0.0	0.24	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.40	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.73	0.0	0.0	0.0	1.52											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.75	0.02	0.13	0.0	0.0											
18	0.0	0.29	0.0	0.0	0.0	0.10	0.0	0.0	0.0	1.88	0.64	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.01	0.0	0.08	0.60	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.10	0.0	0.70	0.0	0.0	0.0	0.06	0.0	0.0											
21	0.0	1.44	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.03	0.0	0.11	0.0	0.0	0.0	0.0	0.35	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.69	0.0	0.29	0.0	0.05	0.0											
24	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0											
25	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.02	0.53	0.0	0.0	0.0	0.0	0.72	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.20	0.0	0.0	0.02	0.0	0.02	0.0	0.01	0.0	0.39											
30	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.03	0.05	0.0											
31	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.73	1.84	0.17	0.78	3.34	4.59	2.81	3.48	5.29	4.51	0.61	3.72												
STA AV	1.06	1.30	1.46	2.60	3.96	3.08	2.24	3.01	4.66	2.10	1.96	1.21												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 11 yr (1961-71) record period.

1971					CHICKASHA, OKLAHOMA					WATERSHED 621 NEAR TABLE		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.29	5.62	5.36	2.38	1.38	6.56	3.50	0.57	0.52	4.37	5.06	4.92
2	3.68	4.98	5.17	2.03	1.58	6.43	31.65	0.44	0.50	86.27	4.48	6.36
3	13.41	4.75	5.11	1.88	1.48	131.82	6.93	0.41	0.45	119.17	3.70	8.01
4	3.64	4.69	4.93	1.88	1.03	38.23	4.05	0.36	0.34	60.51	3.50	7.23
5	2.23	4.52	4.75	1.87	0.80	26.29	2.13	0.37	0.22	49.58	2.99	6.99
6	2.23	4.21	4.60	1.37	0.79	17.42	1.31	3.52	5.85	38.85	2.78	6.57
7	2.23	3.34	3.86	1.51	0.91	12.20	1.09	1.63	1.93	26.55	2.68	6.32
8	2.23	3.01	3.60	1.58	0.90	10.23	1.10	0.98	1.46	21.46	2.76	8.26
9	2.23	3.37	3.52	1.27	0.74	8.17	1.23	2.79	0.68	15.58	2.80	10.09
10	2.23	4.31	3.13	1.10	3.45	6.28	0.76	1.36	0.67	11.31	2.93	19.02
11	2.23	4.18	2.97	1.18	2.69	5.57	0.50	1.03	0.42	7.47	3.09	10.40
12	2.23	4.06	3.07	1.44	2.23	23.81	0.27	1.31	0.16	6.09	3.23	8.29
13	2.23	3.65	3.02	1.74	1.88	13.96	0.23	2.84	0.11	5.39	3.23	7.20
14	2.23	3.56	2.55	1.94	1.67	7.78	0.28	31.48	0.12	4.96	3.15	133.41
15	2.40	3.43	2.36	1.85	1.59	4.57	0.21	13.70	0.15	4.72	3.39	82.27
16	3.41	3.41	2.25	1.76	1.27	3.17	0.13	6.54	0.12	4.52	3.63	51.30
17	3.63	3.52	2.20	2.21	1.11	2.49	0.06	4.54	0.73	4.35	4.09	40.14
18	3.87	4.31	2.06	1.92	1.16	1.90	0.04	3.02	35.48	11.20	4.18	32.70
19	3.76	4.94	2.30	1.59	0.82	1.52	0.09	2.13	8.26	11.55	3.52	22.60
20	3.60	4.42	2.25	2.73	0.72	9.76	0.23	1.52	4.22	14.38	3.41	16.45
21	3.58	26.36	2.23	2.43	0.71	14.52	0.28	0.94	2.61	7.92	3.50	13.30
22	3.58	15.11	2.23	2.40	0.73	4.73	0.24	0.55	2.06	6.65	4.14	11.16
23	3.58	11.86	2.26	2.55	6.76	3.19	4.28	0.47	2.29	6.05	4.78	10.01
24	3.60	9.50	2.53	2.30	1.59	2.26	1.24	0.47	53.34	5.51	4.57	9.06
25	3.72	8.17	2.98	2.28	0.81	1.65	0.46	0.49	43.80	4.60	4.49	8.27
26	3.56	7.07	2.84	1.88	1.20	1.18	0.36	0.43	29.55	11.98	4.37	8.12
27	4.55	6.12	2.97	1.52	2.86	0.91	0.38	0.37	18.39	18.39	7.49	7.81
28	11.68	5.61	3.29	1.37	1.73	1.04	4.85	0.35	14.37	8.87	4.52	7.10
29	9.98	2.95	2.26	1.37	1.07	1.07	1.28	0.35	9.86	6.73	4.55	10.16
30	8.19	2.61	1.95	1.86	1.05	0.83	0.43	6.83	5.82	4.69	12.66	
31	6.62	2.22			5.30		0.74			5.23		4.74
MEAN	4.188	6.146	3.166	1.885	1.844	12.325	2.282	2.844	8.261	17.807	3.757	19.062
INCHES	0.165	0.192	0.126	0.075	0.074	0.413	0.091	0.115	0.277	0.714	0.150	0.780
STA AV	0.132	0.148	0.161	0.228	0.441	0.217	0.123	0.123	0.340	0.205	0.183	0.172
To convert mean daily discharge in cfs to ft <sup>3</sup> /s, multiply by 0.001117. To convert discharge in inches to ft, multiply by 0.0278. STA AV based on 3 yr (1963-71) record period.												

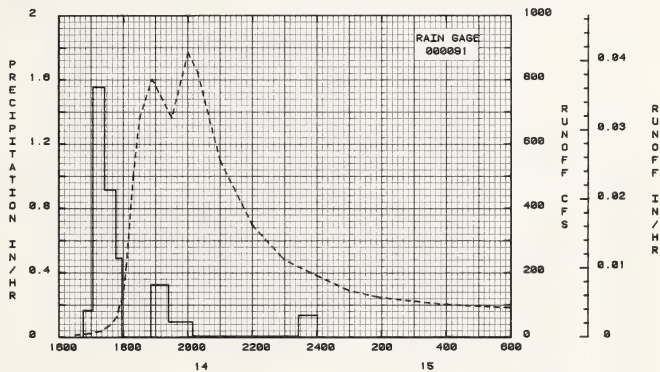
NOTES: To convert mean daily discharge in CFS to IN/HR, multiply by 0.001117. To convert discharge in inches to AC-FT, multiply by 1.776. STA AV based on 3 yr (1963-71) record period.

1971 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLE											
PRECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF DECEMBER 14 - 27, 1971											
RG 000091											
12-14	0.0	0.005	12-14	1645	0.0	0.0	12-14	1630	7.320	0.0	
				1703	0.1667	0.05		1700	12.450	0.0002	
				1725	1.5545	0.62		1718	19.340	0.0004	
				1746	0.9143	0.94		1736	38.700	0.0008	
				1757	0.4909	1.03		1748	64.270	0.0013	
WATERSHED CONDITIONS:											
From a revised 1971 survey											
(p. 69,007-1, this publication); sowed crop - 5%;											
row crop - 1%; alfalfa -											
2%; pasture and range -											
77%; and miscellaneous -											
1%.											
			12-15	1851	0.0	1.03		1753	97.030	0.0016	
				1924	0.3273	1.21		1800	133.560	0.0022	
				2009	0.0933	1.28		1806	232.330	0.0030	
				2326	0.0061	1.30		1811	338.688	0.0041	
				1	0.1371	1.38		1818	499.530	0.0064	
								1830	681.360	0.0120	
								1853	803.908	0.0252	
								1930	681.360	0.0465	
								2000	884.469	0.0647	
								2018	823.540	0.0765	
								2100	587.469	0.0989	
								2200	347.740	0.1197	
								2300	239.420	0.1334	
								2400	190.590	0.1434	
								12-15	100	143.580	0.1512
								200	121.420	0.1574	
								400	100.180	0.1677	
								600	90.890	0.1766	
								900	83.040	0.1887	
								1100	70.240	0.1958	
								1400	68.500	0.2055	
								1500	72.880	0.2088	
								2000	60.990	0.2244	
								2400	56.250	0.2353	
								12-16	1200	51.710	0.2654

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0004654.

1971 SELECTED RUNOFF EVENT			CHICKASAW, OKLAHOMA WATERSHED 621 NEAR TABLER								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF DECEMBER 14 - 27, 1971 (CONTINUED)											
			12-16	2400			2400	45.525	0.2926		
			12-17	1200			1200	39.340	0.3163		
			12-18	2400			2400	36.370	0.3376		
			12-18	1200			1200	33.400	0.3569		
			12-18	2400			2400	27.640	0.3739		
			12-19	1200			1200	21.980	0.3877		
			12-19	2400			2400	18.985	0.3991		
			12-20	1200			1200	16.090	0.4089		
			12-20	2400			2400	14.650	0.4175		
			12-21	1200			1200	13.210	0.4253		
			12-21	2400			2400	12.110	0.4328		
			12-22	1200			1200	11.010	0.4389		
			12-22	2400			2400	10.505	0.4449		
			12-23	1200			1200	10.000	0.4506		
			12-23	2400			2400	9.525	0.4561		
			12-24	1200			1200	9.050	0.4613		
			12-24	2400			2400	8.605	0.4662		
			12-25	1200			1200	8.160	0.4709		
			12-25	2400			2400	8.160	0.4755		
			12-26	1200			1200	8.160	0.4801		
			12-27	2400			2400	8.015	0.4846		
			12-27	1200			1200	7.870	0.4890		
			12-27	2400			2400	7.465	0.4933		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004654.



EVENT OF DECEMBER 14 - 27, 1971  
CHICKASAW, OKLAHOMA WATERSHED 621 NEAR TABLER

## CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT

LOCATION: Sugar Creek Watershed above Gracemont in Caddo County, Okla.; tributary to Washita River; Red River Basin.  
GAGING STATION—SP1/8 E. 9, T. 8N., R. 10 W., lat. 35 deg. 10 min. 30 sec., long. 98 deg. 15 min. 30 sec., one mile south of Gracemont, Okla., on downstream side of county road bridge.

AREA: 131780.00 acres 205.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
	P	1.12	1.30	0.0	0.52	3.25	4.62	2.44	3.97	4.55	2.98	0.76	2.32	27.83										
1971	Q	0.019	0.025	0.010	0.009	0.009	0.129	0.011	0.031	0.023	0.014	0.023	0.069	0.374										
STA AV	P	0.59	0.90	1.29	2.43	3.68	3.78	1.88	2.79	5.20	1.61	1.54	1.10	26.79										
	Q	0.048	0.287	0.076	0.119	0.230	0.119	0.014	0.028	0.202	0.030	0.036	0.053	1.243										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																								

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 10%; row crop - 12%; alfalfa - 4%; pasture and range - 56%; and miscellaneous - 10%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.18-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). The stream gaging station was maintained from Oct. 1955 to Oct. 1963 by the U.S. Geological Survey. Precipitation data obtained from a Thiessen weighted average of 32 gages on the watershed, precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT											
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.76	0.0	0.0	0.0	0.01	0.05											
2	0.66	0.0	0.0	0.0	0.0	0.0	0.27	0.07	0.0	0.0	0.57	0.0	0.45											
3	0.46	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.18											
4	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.04	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.02	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.85	0.0	0.0	0.01	0.05											
9	0.0	0.0	0.0	0.0	0.0	0.36	0.86	0.0	0.0	0.01	0.0	0.0	0.02											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.05											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.06	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.82	0.0	0.0	0.0	1.20											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.02											
16	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.02	0.0	1.69	0.01	0.04	0.0											
18	0.0	0.29	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.83	0.52	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.03	0.0	0.0											
21	0.0	0.99	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.56	0.0											
23	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.25	0.02	0.09	0.0	0.07	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.02	0.90	0.0	0.0	0.0	0.0	0.83	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.21	0.98	0.0	0.03	0.0	0.0											
29	0.0	0.0	0.0	0.06	0.0	0.0	0.19	0.58	0.0	0.64	0.0	0.25	0.0											
30	0.0	0.0	0.0	0.0	0.31	0.32	0.0	0.0	0.0	0.13	0.07	0.0	0.0											
31	0.0					1.29		0.0					0.0											
TOTAL	1.12	1.30	0.0	0.52	3.25	4.62	3.78	2.44	3.97	4.55	2.98	0.76	2.32											
STA AV	0.59	0.90	1.29	2.43	3.68	3.78	1.88	2.79	5.20	1.61	1.54	1.10												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 32 rain gages on the watershed. STA AV based on 11 yr. (1961-71) record period.

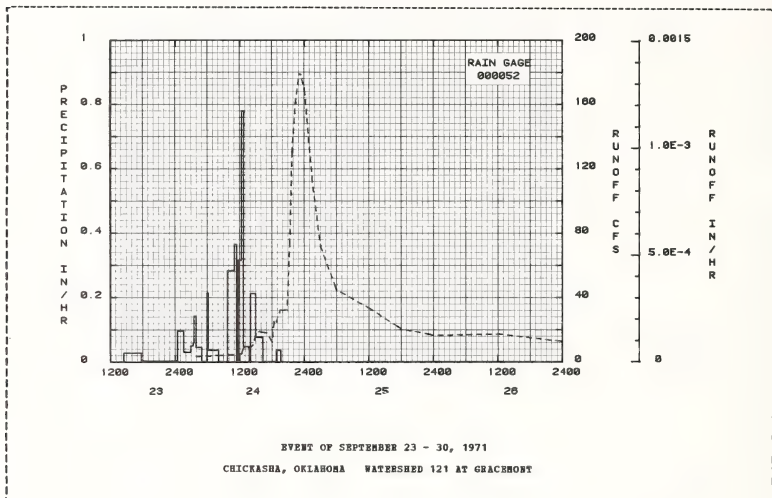
1971 BEAN DAILY DISCHARGE (cfs)													CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.70	2.91	4.71	0.04	0.13	42.85	20.58	0.0	0.38	2.45	5.10	7.26	1	2.70	2.91	4.71	0.04	0.13	42.85	20.58	0.0	0.38	2.45	5.10	7.26
2	3.56	3.20	5.00	0.09	0.01	13.15	15.36	0.0	0.14	3.41	4.34	11.66	2	3.56	3.20	5.00	0.09	0.01	13.15	15.36	0.0	0.14	3.41	4.34	11.66
3	7.90	3.46	4.40	0.10	0.0	65.70	13.36	0.0	0.18	3.88	3.25	17.99	3	7.90	3.46	4.40	0.10	0.0	65.70	13.36	0.0	0.18	3.88	3.25	17.99
4	3.71	3.61	5.00	0.14	1.65	44.06	5.96	0.0	0.11	3.02	2.50	10.75	4	3.71	3.61	5.00	0.14	1.65	44.06	5.96	0.0	0.11	3.02	2.50	10.75
5	2.73	4.18	4.71	0.32	0.46	27.99	1.35	0.0	0.10	2.64	2.35	9.45	5	2.73	4.18	4.71	0.32	0.46	27.99	1.35	0.0	0.10	2.64	2.35	9.45
6	2.70	3.57	4.40	0.14	0.10	16.41	0.13	0.0	0.10	2.04	2.00	8.63	6	2.70	3.57	4.40	0.14	0.10	16.41	0.13	0.0	0.10	2.04	2.00	8.63
7	2.70	3.20	3.99	0.09	0.01	9.79	0.07	0.0	0.10	1.65	1.68	8.50	7	2.70	3.20	3.99	0.09	0.01	9.79	0.07	0.0	0.10	1.65	1.68	8.50
8	2.80	2.98	2.91	0.05	0.0	61.28	0.01	1.72	0.10	1.60	1.77	8.50	8	2.80	2.98	2.91	0.05	0.0	61.28	0.01	1.72	0.10	1.60	1.77	8.50
9	3.48	3.20	1.94	0.38	2.96	138.84	0.0	0.14	0.10	1.57	1.80	8.50	9	3.48	3.20	1.94	0.38	2.96	138.84	0.0	0.14	0.10	1.57	1.80	8.50
10	4.06	3.61	1.69	0.95	0.96	82.73	0.0	0.01	0.09	1.39	1.80	8.63	10	4.06	3.61	1.69	0.95	0.96	82.73	0.0	0.01	0.09	1.39	1.80	8.63
11	4.15	4.32	0.96	0.23	0.36	89.59	0.0	0.0	0.0	1.09	1.80	9.51	11	4.15	4.32	0.96	0.23	0.36	89.59	0.0	0.0	0.0	1.09	1.80	9.51
12	3.05	3.10	0.57	0.01	0.11	35.25	0.0	0.0	0.0	0.75	1.82	9.86	12	3.05	3.10	0.57	0.01	0.11	35.25	0.0	0.0	0.0	0.75	1.82	9.86
13	3.74	2.82	0.69	0.57	0.02	23.04	0.0	1.16	0.0	0.73	1.98	6.23	13	3.74	2.82	0.69	0.57	0.02	23.04	0.0	1.16	0.0	0.73	1.98	6.23
14	4.29	3.48	0.84	0.35	0.09	16.77	0.0	43.26	0.0	0.89	2.30	13.89	14	4.29	3.48	0.84	0.35	0.09	16.77	0.0	43.26	0.0	0.89	2.30	13.89
15	4.21	3.95	1.09	1.74	0.09	12.94	0.0	85.26	0.0	1.00	4.38	48.85	15	4.21	3.95	1.09	1.74	0.09	12.94	0.0	85.26	0.0	1.00	4.38	48.85
16	4.59	3.54	0.79	0.93	0.01	9.10	0.0	5.49	0.16	1.06	6.50	28.93	16	4.59	3.54	0.79	0.93	0.01	9.10	0.0	5.49	0.16	1.06	6.50	28.93
17	4.32	3.39	1.16	1.06	0.0	5.88	0.0	2.64	1.70	1.21	7.60	28.38	17	4.32	3.39	1.16	1.06	0.0	5.88	0.0	2.64	1.70	1.21	7.60	28.38
18	3.51	4.25	2.76	1.70	0.0	3.38	0.0	1.63	4.79	2.85	6.43	24.73	18	3.51	4.25	2.76	1.70	0.0	3.38	0.0	1.63	4.79	2.85	6.43	24.73
19	2.98	4.10	2.10	1.85	0.0	2.10	0.0	1.01	2.63	2.76	6.15	10.70	19	2.98	4.10	2.10	1.85	0.0	2.10	0.0	1.01	2.63	2.76	6.15	10.70
20	3.93	2.00	1.54	15.60	0.0	1.65	0.0	0.52	2.11	2.70	5.68	12.32	20	3.93	2.00	1.54	15.60	0.0	1.65	0.0	0.52	2.11	2.70	5.68	12.32
21	4.02	8.16	0.84	9.23	0.0	6.56	0.0	0.23	2.55	2.61	4.61	9.16	21	4.02	8.16	0.84	9.23	0.0	6.56	0.0	0.23	2.55	2.61	4.61	9.16
22	3.57	9.09	0.88	6.25	0.0	2.61	0.0	0.11	2.19	2.06	4.90	7.69	22	3.57	9.09	0.88	6.25	0.0	2.61	0.0	0.11	2.19	2.06	4.90	7.69
23	3.40	10.41	0.89	3.85	1.03	0.39	2.08	0.10	1.73	1.80	6.26	7.45	23	3.40	10.41	0.89	3.85	1.03	0.39	2.08	0.10	1.73	1.80	6.26	7.45
24	2.82	10.48	0.75	1.99	0.03	0.09	0.29	0.10	27.22	1.63	5.85	7.15	24	2.82	10.48	0.75	1.99	0.03	0.09	0.29	0.10	27.22	1.63	5.85	7.15
25	2.91	11.76	6.34	1.32	0.0	0.01	0.11	0.10	42.89	1.74	5.45	7.15	25	2.91	11.76	6.34	1.32	0.0	0.01	0.11	0.10	42.89	1.74	5.45	7.15
26	3.06	9.00	0.16	0.96	0.17	0.0	0.10	0.10	15.94	3.05	5.36	7.51	26	3.06	9.00	0.16	0.96	0.17	0.0	0.10	0.10	15.94	3.05	5.36	7.51
27	2.50	5.90	0.44	0.46	1.04	0.0	0.07	0.10	6.80	2.73	5.27	7.02	27	2.50	5.90	0.44	0.46	1.04	0.0	0.07	0.10	6.80	2.73	5.27	7.02
28	2.32	4.57	0.82	0.30	0.15	0.0	2.06	0.10	5.26	4.23	6.18	7.21	28	2.32	4.57	0.82	0.30	0.15	0.0	2.06	0.10	5.26	4.23	6.18	7.21
29	1.90	0.0	0.31	0.24	0.09	0.0	0.14	20.82	3.63	5.91	7.04	7.27	29	1.90	0.0	0.31	0.24	0.09	0.0	0.14	20.82	3.63	5.91	7.04	7.27
30	2.06	0.0	0.27	0.34	0.41	0.0	0.01	7.27	2.89	6.45	7.40	8.26	30	2.06	0.0	0.27	0.34	0.41	0.0	0.01	7.27	2.89	6.45	7.40	8.26
31	2.64	0.0	0.19	0.0	42.46	0.0	0.0	1.27	5.81	5.81	8.06	0.0	31	2.64	0.0	0.19	0.0	42.46	0.0	0.0	1.27	5.81	5.81	8.06	0.0
MEAN	3.430	4.934	1.856	1.708	1.689	23.738	1.990	5.585	4.196	2.571	4.318	12.323	MEAN	3.430	4.934	1.856	1.708	1.689	23.738	1.990	5.585	4.196	2.571	4.318	12.323
INCHES	0.019	0.025	0.010	0.009	0.009	0.129	0.011	0.031	0.023	0.022	0.069	0.069	INCHES	0.019	0.025	0.010	0.009	0.009	0.129	0.011	0.031	0.023	0.022	0.069	0.069
STA AV	0.048	0.287	0.076	0.119	0.230	0.119	0.014	0.028	0.202	0.030	0.036	0.053	STA AV	0.048	0.287	0.076	0.119	0.230	0.119	0.014	0.028	0.202	0.030	0.036	0.053

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0001806. To convert discharge in inches to AC-FT, multiply by 10,982. STA AV based on 9 yr (1963-71) record period.

1971 SELECTED RUNOFF EVENT						CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF SEPTEMBER 23 - 30, 1971											
RG 000052			RG 000052								
9-23	0.0		9-23	1428	0.0	0.0	9-24	400	3,500	0.0	
9-24		0.000	9-24	1743	0.0277	0.09		900	4,100	0.0001	
				27	0.0030	0.11		1218	5,100	0.0002	
				136	0.0957	0.22		1248	9,000	0.0002	
				255	0.0304	0.26		1348	8,500	0.0003	
WATERSHED CONDITIONS:											
From a revised 1971 survey											
(p. 63,007-1, this publication); sowed crop - 10%;											
row crop - 12%; alfalfa -											
4%; pasture and range -											
56%; and miscellaneous -											
16%.											
				319	0.0500	0.28		1430	10,600	0.0004	
				329	0.0600	0.29		1500	17,300	0.0005	
				350	0.1429	0.34		1530	18,800	0.0006	
				457	0.0488	0.39		1700	19,000	0.0008	
				553	0.0	0.39		1800	12,400	0.0009	
				607	0.2143	0.44		1823	25,100	0.0010	
				802	0.0365	0.51		1848	25,000	0.0011	
				945	0.0	0.51		1930	32,300	0.0013	
				1101	0.2842	0.87		2048	32,400	0.0018	
				1124	0.3652	1.01		2118	76,400	0.0016	
				1143	0.0	1.01		2141	130,300	0.0021	
				1221	0.3158	1.21		2218	160,600	0.0028	
				1244	0.7800	1.47		2300	178,900	0.0037	
				1345	0.0469	1.52		2318	178,600	0.0041	
				1400	0.0	1.52		2400	168,900	0.0050	
				1459	0.2136	1.73		9-25	130	111,500	0.0066
				1618	0.0760	1.83			300	71,700	0.0070
				1850	0.0	1.83			600	44,700	0.0089
				1940	0.0360	1.86			1200	33,400	0.0107
									1800	20,500	0.0119
									2400	16,500	0.0127
								9-26	1200	17,300	0.0142
									2400	12,650	0.0156
								9-27	1200	8,000	0.0165
									2400	6,550	0.0172

1971 SELECTED RUNOFF EVENT						CHICKASAW, OKLAHOMA WATERSHED 121 AT GRACEMONT					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 23 - 30, 1971 (CONTINUED)											
							9-28	1200	5.100	0.0177	
								2400	4.300	0.0181	
			9-29	1200				1200	3.500	0.0185	
								2400	3.200	0.0188	
			9-30	1200				1200	2.900	0.0191	
								2400	2.550	0.0193	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000007526.



## CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

LOCATION: Beddingfield Watershed is the West branch of East Bitter Creek 1.4 miles above East Bitter Creek gaging station, in Grady County, Okla.; tributary to East Bitter Creek; Washita River; Red River Basin. GAGING STATION--521/4 sec. 22, T. 7 N., R. 6 W., lat. 35 deg. 03 min. 53 sec., long. 97 deg. 49 min. 13 sec.

AREA: 12314.00 acres 19.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA					WATERSHED 513 NEAR TABLER					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971	P 0.61	1.83	0.12	0.81	4.20	5.83	2.62	3.63	5.57	5.70	0.46	3.13	34.51			
	Q 0.065	0.084	0.067	0.062	0.059	0.598	0.009	0.053	0.221	0.820	0.095	0.360	2.492			
STA AV	P 0.88	1.30	1.60	2.90	3.57	2.81	2.38	3.83	4.55	2.31	1.09	1.24	28.45			
	Q 0.092	0.098	0.150	0.378	0.314	0.264	0.085	0.204	0.252	0.169	0.072	0.111	2.167			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	10-2	0.111	10-2	0.108	10-2	0.207	10-2	0.475	10-2	0.603	10-2	0.659	10-2	0.692	10-2	0.724
MAXIMUMS FOR PERIOD OF RECORD																
8-8	0.169	8-8	0.164	8-8	0.307	8-7	0.562	6-18	0.611	10-2	0.659	4-12	0.754	4-9	0.875	
1965		1965		1965		1965		1969		1971		1967		1967		

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 4%; alfalfa - 1%; pasture and range - 90%; and miscellaneous - 5%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.16-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 18 gages on the watershed. Precipitation and runoff records began Jan. 1965. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971		DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA					WATERSHED 513 NEAR TABLER				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0	0.02				
2	0.10	0.0	0.05	0.0	0.0	0.81	0.0	0.0	0.0	3.61	0.0	0.53				
3	0.51	0.0	0.0	0.0	0.02	0.93	0.0	0.0	0.0	0.13	0.0	0.13				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18				
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.08	0.0	0.0	0.0				
7	0.0	0.03	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.83	0.0	0.08	0.02	0.52				
9	0.0	0.0	0.0	0.0	0.63	0.25	0.07	0.0	0.0	0.0	0.0	0.14				
10	0.0	0.0	0.0	0.0	0.01	0.39	0.0	0.0	0.0	0.0	0.0	0.21				
11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.92	0.0	0.38	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.56	0.0	0.0	0.0	0.0				
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0	1.10				
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.01				
16	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0				
17	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	1.45	0.02	0.05	0.0				
18	0.0	0.22	0.0	0.0	0.10	0.0	0.0	0.0	1.57	0.43	0.0	0.0				
19	0.0	0.0	0.0	0.12	0.0	0.0	0.01	0.0	0.09	0.58	0.0	0.0				
20	0.0	0.0	0.0	0.08	0.0	0.53	0.0	0.0	0.0	0.13	0.0	0.0				
21	0.0	1.50	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0				
22	0.0	0.0	0.0	0.03	0.0	0.0	0.14	0.0	0.0	0.0	0.31	0.0				
23	0.0	0.0	0.0	0.0	0.99	0.0	0.48	0.0	0.24	0.0	0.04	0.0				
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0	0.0				
25	0.0	0.07	0.07	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.23	0.95	0.0	0.0	0.0	0.0	0.69	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.01	0.0	0.0	0.0	0.01	1.06	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.17	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.29				
30	0.0	0.0	0.0	0.0	0.29	0.02	0.0	0.0	0.0	0.03	0.04	0.0				
31	0.0		0.0		1.04		0.0	0.0		0.0		0.0				
TOTAL	0.61	1.83	0.12	0.81	4.20	5.83	2.62	3.63	5.57	5.70	0.46	3.13				
STA AV	0.88	1.30	1.60	2.90	3.57	2.81	2.38	3.83	4.55	2.31	1.09	1.24				

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 18 rain gages on the watershed. STA AV based on 7 yr (1965-71) record period.

1971		MEAN DAILY DISCHARGE (cfs)					CHICKASAW, OKLAHOMA				WATERSHED 513 BEAR TABLE			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	1.48	0.93	1.44	0.93	0.98	15.89	0.06	0.0	0.0	0.44	1.76	1.79		
2	1.61	0.93	1.24	0.92	0.84	1.77	2.51	0.0	0.0	185.81	1.69	2.19		
3	1.68	1.01	0.98	0.93	0.83	100.79	1.32	0.0	0.0	162.24	1.68	2.65		
4	0.99	1.11	1.26	0.97	0.85	5.80	0.32	0.0	0.0	7.25	1.65	1.79		
5	0.87	1.04	1.25	1.02	0.77	2.26	0.16	0.0	0.0	4.94	1.59	2.50		
6	0.87	0.98	1.10	1.03	0.65	1.21	0.06	0.0	0.0	3.38	1.48	2.68		
7	0.88	0.69	1.05	1.02	0.61	1.14	0.03	0.0	0.0	2.52	1.48	2.44		
8	0.97	0.68	1.13	0.98	0.68	78.64	0.02	0.0	0.0	2.18	1.58	4.69		
9	1.07	0.50	1.14	0.97	1.19	5.82	0.02	0.0	0.0	1.99	1.60	7.40		
10	1.08	1.03	1.14	0.98	1.26	3.11	0.01	0.0	0.0	1.76	1.59	6.49		
11	1.13	1.11	1.15	1.02	0.85	3.56	0.00	0.0	0.0	1.54	1.55	4.10		
12	1.04	1.24	0.96	1.35	0.58	0.58	0.00	0.0	0.0	1.39	1.40	3.35		
13	1.14	1.03	1.24	0.88	0.46	6.10	0.0	0.40	0.0	1.27	1.65	3.04		
14	1.13	1.03	1.09	0.89	0.21	3.26	0.0	19.62	0.0	1.20	1.55	34.48		
15	1.05	1.03	0.99	1.02	0.09	2.14	0.0	3.98	0.0	1.15	1.53	37.57		
16	1.08	1.03	1.02	1.15	0.06	1.57	0.0	1.16	0.0	1.14	1.54	8.20		
17	1.01	1.04	0.99	1.30	0.06	1.26	0.0	0.81	0.06	1.21	1.57	5.73		
18	0.97	1.01	0.96	0.98	0.06	0.98	0.0	0.91	0.0	1.18	1.48	7.3		
19	0.98	1.37	0.93	1.22	0.03	0.80	0.0	0.27	0.21	3.50	1.46	4.57		
20	0.98	1.06	0.93	1.30	0.01	0.85	0.0	0.20	0.50	5.49	1.47	4.22		
21	1.02	9.88	1.02	1.21	0.00	10.41	0.0	0.15	0.29	2.17	1.55	3.95		
22	1.02	3.58	1.04	1.14	0.02	1.73	0.0	0.10	0.17	1.65	1.79	3.83		
23	0.99	1.39	1.07	1.08	5.81	1.17	0.0	0.07	0.23	1.54	2.15	3.88		
24	1.03	1.45	1.09	1.08	0.81	0.95	0.0	0.57	12.12	5.33	1.53	3.69		
25	1.07	1.64	1.23	1.02	0.43	0.61	0.0	0.05	10.72	1.53	1.71	3.70		
26	1.03	1.48	1.20	1.00	0.70	0.49	0.0	0.06	1.81	3.20	1.68	3.77		
27	0.98	1.42	1.15	1.33	0.40	0.38	0.0	0.06	1.02	6.34	1.68	3.64		
28	0.98	1.50	1.18	1.16	0.95	0.29	0.0	0.04	0.70	2.61	1.68	3.47		
29	1.03	1.09	1.17	1.07	0.66	1.13	0.0	0.01	0.54	2.26	1.67	4.22		
30	1.07	1.04	1.17	1.05	0.85	0.05	0.0	0.00	0.48	4.88	1.63	4.88		
31	1.02				3.63		0.0	0.0		1.85		1.98		
MEAN	1.083	1.549	1.11	1.066	0.985	10.318	0.145	0.886	3.811	13.692	1.633	6.012		
INCHES	0.065	0.084	0.067	0.062	0.059	0.598	0.009	0.053	0.221	0.820	0.095	0.360		
STA AV	0.092	0.098	0.150	0.378	0.314	0.264	0.085	0.204	0.252	0.169	0.072	0.111		

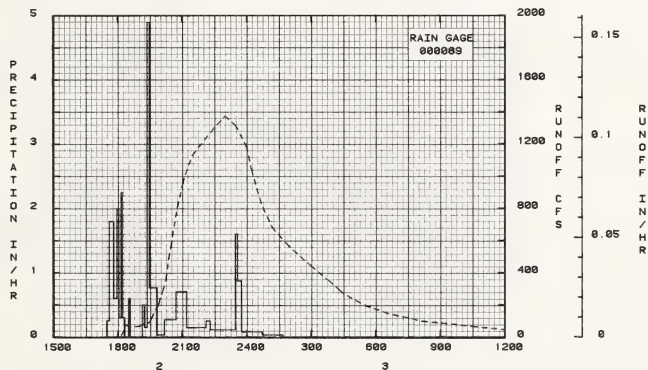
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.001933. To convert discharge in inches to AC-FT, multiply by 1,026. STA AV based on 7 yr (1965-71) record period.

1971 SELECTED RUNOFF EVENTS			CRICKKASHA, OKLAHOMA			WATERSHED 513 NEAR TABLER						
PRECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF OCTOBER 2 - 8, 1971												
RG 000089			RG 000089									
10- 2	0.0	0.001	10- 2	1730	0.0	0.0	10- 2	1741	0.560	0.0		
				1737	0.2572	0.03			3.570	0.0001		
				1749	1.7999	0.39		1811	11.650	0.0002		
				1758	0.6000	0.48		1818	40.930	0.0004		
				1804	1.9999	0.68		1823	73.400	0.0008		
WATERSHED CONDITIONS:												
From a revised 1971 survey			1810			0.3000	0.71	1836			63.540	0.0020
(p. 69.007-1, this publication); sowed crop - 4%;			1814			2.2500	0.86	1900			69.180	0.0042
alfalfa - 1%; pasture and			1920			0.5000	0.89	1910			91.920	0.0074
range - 90%; and miscellaneous - 5%.			1831			0.0	0.89	1941			143.950	0.0091
			1835			0.6000	0.93	1953			195.320	0.0119
			1909			0.0	0.93	2000			240.210	0.0180
			1915			0.5000	0.98	2011			319.188	0.0180
			1923			0.1500	1.00	2018			395.128	0.0214
			1929			4.9004	1.49	2023			690.500	0.0245
			1951			0.7636	1.77	2030			886.928	0.0295
			2011			0.0300	1.78	2036			658.948	0.0343
			2044			0.2727	1.33	2103			683.090	0.0451
			2113			0.7034	2.27	2106			987.308	0.0679
			2207			0.1444	2.40	2130			1132.878	0.1023
			2219			0.2500	2.45	2230			1300.520	0.2003
			2329			0.1114	2.58	2300			1374.568	0.2542
			2335			1.5999	2.74	2330			1315.128	0.3084
			2346			0.8727	2.90	2400			1182.608	0.3587
			10- 3	44	0.0828	2.98	10- 3	18	1007.958	0.3849		
				142	0.0310	3.01		41	831.398	0.4133		
								111	681.628	0.4438		
								200	560.550	0.4848		
								300	442.520	0.5252		
								400	330.370	0.5563		
								430	270.478	0.5684		

NOTES: To convert runoff in CFS to IS/HR, multiply by 0.00008054.

1971 SELECTED RUSOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER								
ANTECEDENT CONDITIONS			RAINFALL				RUSOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF OCTOBER 2 - 8, 1971 (CONTINUED)											
				10- 3			530	195.320	0.5872		
							636	143.950	0.6022		
							811	96.980	0.6175		
							1030	65.120	0.6326		
							1330	44.570	0.6459		
				1800			1800	30.670	0.6595		
				2400			2400	22.230	0.6723		
				10- 4			1200	11.950	0.6888		
				1800			1800	7.730	0.6936		
				2400			2400	6.220	0.6970		
				10- 5			1200	4.760	0.7023		
				2400			2400	4.035	0.7065		
				10- 6			1200	3.310	0.7100		
				2400			2400	2.880	0.7130		
				10- 7			1200	2.450	0.7156		
				2400			2400	2.310	0.7179		
				10- 8			1200	2.170	0.7201		
				2400			2400	2.085	0.7222		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0008054.



EVENT OF OCTOBER 2 - 8, 1971  
CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

## CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET

LOCATION: Salt Creek Watershed 1/2 mile East of U.S. highway 81 near Pocasset, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 28, T. 8 N., R. 7 W., lat. 35 deg. 08 min. 44 sec., long. 97 deg. 57 min. 30 sec.

AREA: 15206.00 acres 23.76 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P 1.13	1.30	0.02	0.97	5.14	6.68	2.63	2.53	3.86	3.07	0.85	2.41	30.59														
	Q 0.009	0.012	0.004	0.013	0.165	1.529	0.005	0.020	0.080	0.155	0.005	0.065	2.063														
STA AV	P 0.82	0.96	1.46	3.62	4.65	3.86	1.87	2.23	4.04	2.38	1.23	1.06	28.17														
	Q 0.010	0.010	0.018	0.606	0.612	0.464	0.005	0.010	0.039	0.109	0.023	0.020	1.927														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
Date		Rate		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days											
Date		Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.											
1971	6-3	0.056	6-3	0.056	6-3	0.110	6-3	0.313	6-3	0.494	6-2	0.575	6-2	0.595	5-31	1.143											
MAXIMUMS FOR PERIOD OF RECORD																											
4-12		0.320		4-12 0.314		4-12 0.600		4-12 1.201		4-12 1.310		4-12 1.338		4-12 1.424		4-9 1.720											
1967				1967		1967		1967		1967		1967		1967		1967											

NOTES: Watershed conditions: From a revised 1971 survey (p. 69.007-1, this publication); sowed crop - 36%; row crop - 1%; alfalfa - 3%; pasture and range - 49%; and miscellaneous - 11%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 69.27-4 (topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation and runoff records began Jan. 1967. For long-term precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.04	0.0	0.33	0.0	0.0	0.0	0.0	0.02	0.04												
2	0.14	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	1.27	0.0	0.36	0.0												
3	0.99	0.0	0.0	0.0	0.01	0.94	0.0	0.0	0.0	0.0	0.0	0.08	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0												
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	1.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.78	0.0	0.02	0.62	0.32	0.0												
9	0.0	0.0	0.0	0.0	0.88	0.48	0.0	0.0	0.0	0.0	0.0	0.10	0.0												
10	0.0	0.0	0.0	0.0	0.01	0.68	0.0	0.0	0.0	0.0	0.0	0.08	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.22	0.0	0.0	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	0.0	0.0	0.0	0.98	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.01	0.0												
16	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.91	0.04	0.25	0.0	0.0												
18	0.0	0.32	0.0	0.0	0.11	0.0	0.0	0.0	0.90	0.51	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.02	0.37	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.03	0.0	0.33	0.0	0.0	0.0	0.12	0.0	0.0	0.0												
21	0.0	0.92	0.0	0.0	0.0	1.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.47	0.0	0.0												
23	0.0	0.0	0.0	0.0	0.47	0.0	1.25	0.0	0.15	0.0	0.04	0.0	0.0												
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	1.85	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.24	1.85	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.01	0.0	0.04	0.0	0.0	0.92	0.01	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.01	0.01	0.0	0.0	0.12	0.0	0.0	0.11	0.0	0.33	0.0												
30	0.0	0.0	0.0	0.0	0.24	0.03	0.0	0.0	0.0	0.03	0.05	0.0	0.0												
31	0.0	0.0	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	1.13	1.30	0.02	0.97	5.14	6.68	2.63	2.53	3.86	3.07	0.85	2.41													
STA AV	0.82	0.96	1.46	3.62	4.65	3.86	1.87	2.23	4.04	2.38	1.23	1.06													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 5 yr (1967-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.22	0.09	0.07	0.05	0.19	130.82	0.16	0.05	0.0	0.21	0.13	0.24
2	0.23	0.10	0.06	0.05	0.20	12.75	0.13	0.04	0.0	36.18	0.11	0.36
3	0.99	0.12	0.07	0.05	0.17	361.15	0.11	0.01	0.0	52.50	0.09	0.49
4	0.63	0.13	0.05	0.05	0.15	11.23	0.09	0.01	0.0	2.46	0.09	0.48
5	0.43	0.10	0.07	0.05	0.12	3.12	0.06	0.00	0.12	0.85	0.08	0.40
6	0.28	0.08	0.11	0.06	0.06	1.40	0.05	0.00	0.06	0.39	0.05	0.37
7	0.21	0.08	0.12	0.06	0.04	22.23	0.04	0.01	0.73	0.24	0.06	0.37
8	0.17	0.08	0.08	0.06	0.04	167.38	0.03	1.83	1.04	0.20	0.06	0.50
9	0.17	0.08	0.08	0.06	0.06	20.06	0.03	0.30	0.15	0.06	0.06	0.93
10	0.14	0.10	0.08	0.06	0.06	8.38	0.03	0.02	0.02	0.13	0.08	0.79
11	0.12	0.10	0.08	0.06	0.06	50.02	0.02	0.01	0.00	0.11	0.08	0.53
12	0.12	0.10	0.08	0.06	0.03	9.48	0.01	0.01	0.0	0.12	0.08	0.37
13	0.09	0.06	0.08	0.06	0.02	4.77	0.01	0.02	0.17	0.18	0.08	0.30
14	0.09	0.06	0.06	0.05	0.04	2.09	0.00	2.13	0.06	0.16	0.09	2.14
15	0.07	0.06	0.05	0.06	0.02	6.93	0.0	4.96	0.01	0.15	0.09	21.35
16	0.08	0.06	0.06	0.08	0.01	0.51	0.0	2.25	0.00	0.13	0.09	3.80
17	0.12	0.06	0.06	0.08	0.01	0.36	0.0	0.66	0.06	0.14	0.11	1.44
18	0.12	0.72	0.07	0.06	0.00	0.26	0.0	0.20	0.96	0.19	0.09	0.74
19	0.10	0.15	0.06	0.06	0.0	0.20	0.0	0.07	0.29	0.22	0.09	0.57
20	0.11	0.01	0.06	0.06	0.0	0.19	0.0	0.02	0.11	0.31	0.09	0.48
21	0.13	2.95	0.08	0.06	0.0	151.34	0.0	0.01	0.04	0.16	0.10	0.41
22	0.12	0.58	0.08	0.06	0.00	9.06	0.00	0.01	0.01	0.17	0.13	0.39
23	0.12	0.81	0.08	0.06	0.01	2.55	1.08	0.01	0.02	0.17	0.17	0.37
24	0.10	0.33	0.08	0.06	0.03	1.15	0.33	0.01	25.45	0.15	0.20	0.36
25	0.10	0.32	0.10	0.06	0.01	0.56	0.10	0.01	19.13	0.13	0.22	0.36
26	0.10	0.43	0.10	0.47	14.42	0.33	0.04	0.01	1.67	0.61	0.20	0.36
27	0.10	0.29	0.10	1.91	63.98	0.23	0.01	0.01	0.59	1.04	0.17	0.36
28	0.10	0.13	0.10	0.18	3.72	0.16	0.38	0.01	0.20	1.59	0.17	0.33
29	0.12	0.08	0.08	0.16	1.07	0.15	0.05	0.00	0.10	0.48	0.16	0.47
30	0.13	0.08	0.12	0.37	0.14	0.05	0.0	0.08	0.08	0.26	0.20	1.11
31	0.12	0.08	0.08	20.76	0.05	0.05	0.0	0.0	0.17	0.17	0.0	0.52
MEAN	0.185	0.278	0.078	0.285	3.408	32.566	0.093	0.409	1.702	3.193	0.114	1.344
INCHES	0.009	0.012	0.004	0.013	0.165	1.529	0.005	0.020	0.080	0.155	0.005	0.065
STA AV	0.010	0.010	0.018	0.066	0.612	0.464	0.005	0.010	0.039	0.109	0.023	0.020

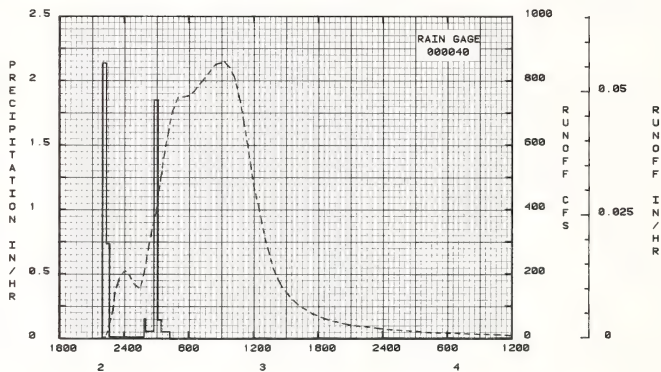
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001565. To convert discharge in inches to AC-FT, multiply by 1.267. STA AV based on 5 yr (1967-71) record period.

1971 SELECTED RUNOFF EVENT CHICKASAW, OKLAHOMA WATERSHED 311 NEAR POCASSSET												
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF				
Date	Rainfall	Runoff		Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)		Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JUNE 2 - 4, 1971												
EG 000040				EG 000040								
6- 2	0.0	0.007		6- 2	2200	0.0	0.0	6- 2	2206	2.510	0.0	
					2223	2.1391	0.82		2218	4.130	0.0	
					2241	0.7334	1.04		2223	11.160	0.0	
				6- 3	153	0.0094	1.07		2230	20.820	0.0001	
					201	0.1500	1.09		2236	36.570	0.0003	
WATERSHED CONDITIONS:					247	0.0522	1.13		2248	59.880	0.0009	
From a revised 1971 survey					311	1.8500	1.87		2300	86.390	0.0019	
(p. 69.007-1, this publication); sowed crop - 36%;					328	0.1412	1.91		2306	116.360	0.0026	
row crop - 1% alfalfa - 3%;					418	0.0480	1.95		2311	182.490	0.0033	
pasture and range - 49% and									2323	165.680	0.0053	
miscellaneous - 11%.									2336	185.160	0.0078	
									2400	207.390	0.0129	
									11	208.310	0.0154	
									30	196.580	0.0196	
									100	166.510	0.0255	
									123	155.900	0.0295	
									136	164.030	0.0318	
									153	202.860	0.0352	
									206	243.290	0.0384	
									218	284.810	0.0418	
									236	337.020	0.0479	
									300	391.830	0.0574	
									311	433.880	0.0628	
									330	514.860	0.0723	
									348	581.830	0.0830	
									411	650.850	0.0984	
									430	704.438	0.1124	
									500	747.050	0.1361	
									600	753.448	0.1850	
									630	766.330	0.2098	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00006522.

1971 SELECTED RUNOFF EVENT						CHICKASAW, OKLAHOMA			WATERSHED 311 NEAR POCASSET		
PRECEDENT CONDITIONS			MAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JUNE 2 - 4, 1971 (CONTINUED)											
							6- 3	730	808.860	0.2612	
								830	850.688	0.3153	
								900	855.780	0.3431	
								918	859.168	0.3599	
								948	846.570	0.3676	
								1018	803.898	0.4104	
								1048	731.138	0.4394	
								1111	658.388	0.4568	
								1130	591.888	0.4697	
								1148	524.398	0.4806	
								1206	461.810	0.4902	
								1230	408.850	0.5076	
								1248	355.270	0.5091	
								1306	310.428	0.5156	
								1330	260.158	0.5230	
								1353	212.900	0.5289	
								1418	183.430	0.5343	
								1441	158.320	0.5386	
								1523	128.870	0.5452	
								1611	102.720	0.5512	
								1730	75.440	0.5589	
								1900	55.860	0.5653	
								2100	40.280	0.5716	
								2400	27.730	0.5783	
							6- 4	430	16.390	0.5848	
								1030	9.830	0.5899	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00006522.



EVENT OF JUNE 2 - 4, 1971  
CHICKASAW, OKLAHOMA WATERSHED 311 NEAR POCASSET

## CHICKASHA, OKLAHOMA WATERSHED C-1

LOCATION: Grady County, Oklahoma; SW 1/4 sec. 26, R. 7 W., T. 7 N., about 2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 17.83 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-1													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	0.45	2.03	0.16	0.41	4.62	4.35	1.77	2.90	5.65	4.98	0.56	2.91	30.79													
	Q	0.0	0.006	0.0	0.0	0.177	0.873	0.0	0.094	0.931	1.793	0.0	0.532	4.405													
STA AV	P	0.81	1.17	1.70	2.61	3.59	2.57	1.76	3.90	4.20	2.07	1.05	1.04	26.49													
	Q	0.0	0.002	0.006	0.038	0.302	0.245	0.049	0.432	0.377	0.314	0.129	0.076	1.969													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days									
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1971		10- 2	0.078	10- 2	0.077	10- 2	0.152	10- 2	0.445	10- 2	0.814	10- 2	1.308	10- 2	1.667	9-28	1.706										
MAXIMUMS FOR PERIOD OF RECORD																											
		4-12	0.081	10- 2	0.077	10- 2	0.152	10- 2	0.445	10- 2	0.814	10- 2	1.308	10- 2	1.667	9-28	1.706										
		1967		1971		1971		1971		1971		1971		1971		1971											

NOTES: Watershed conditions: Continuous cotton - tillage during fallow period consisted of shredding stalks, disking, chiseling, spring-tooth harrowing and spike-tooth harrowing. Cotton was planted during mid-June. Tillage during the growing season consisted of rotary hoeing and cultivating. Principal drain with less than 0.05 ft. grade per 100 feet was maintained during the growing season by use of field cultivator. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Risc. Pub. 1216, pp. 69.30-1 and 69.30-3. Monthly precipitation values obtained from one recording rain gage, No. 173, located near the 1.5 ft. 8-flume. Precipitation and runoff records began January 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0													
2	0.07	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	3.19	0.0	0.0													
3	0.38	0.0	0.0	0.0	0.05	1.14	0.0	0.0	0.0	0.08	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0													
7	0.0	0.01	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.85	0.0	0.03	0.01	0.60													
9	0.0	0.0	0.0	0.0	0.65	0.20	0.13	0.0	0.0	0.0	0.0	0.16													
10	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.20													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.02	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.0	0.0	0.88													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.85	0.0	0.0	0.06	0.0													
18	0.0	0.56	0.0	0.0	0.06	0.0	0.0	1.86	0.0	0.27	0.0	0.0													
19	0.0	0.0	0.0	0.10	0.0	0.0	0.03	0.0	0.11	0.87	0.0	0.0													
20	0.0	0.02	0.0	0.02	0.0	1.25	0.0	0.0	0.0	0.05	0.0	0.0													
21	0.0	1.39	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.03	0.0	0.0	0.17	0.0	0.0	0.0	0.41	0.0													
23	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.25	0.0	0.0	0.02	0.0													
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	1.96	0.0	0.0	0.0													
25	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0	0.47	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.04	0.0	0.0	0.0	0.0	0.52	0.05	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26													
30	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.01	0.06	0.0													
31	0.0				1.87																				
TOTAL	0.45	2.03	0.16	0.41	4.62	4.35	1.77	2.90	5.65	4.98	0.56	2.91													
STA AV	0.81	1.17	1.70	2.61	3.59	2.57	1.76	3.90	4.20	2.07	1.05	1.04													

NOTES: Values obtained from one recording rain gage, No. 173. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CIEKASBA, OKLAHOMA WATERSHED C-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.232	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.441	0.0	0.0	0.0	0.858	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.175	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0 T	0.0	0.0	0.0	0.047
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.055
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.061
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012
12	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.001
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.067
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.010	0.0	0.131
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.049	0.0	0.022
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.004	0.0	0.002
18	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.076	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.004	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.271	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.019	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.132	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0002	0.0	0.0	0.0043	0.0218	0.0	0.0023	0.0232	0.0433	0.0	0.0129
INCHES	0.0	0.006	0.0	0.0	0.177	0.873	0.0	0.094	0.931	1.793	0.0	0.532
STA AV	0.0	0.002	0.006	0.038	0.302	0.285	0.049	0.432	0.377	0.314	0.129	0.076

NOTES: To convert discharge in CFS to IN/DAY, multiply by 1.334922. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-2

LOCATION: Grady County, Oklahoma: SE 1/4, sec. 4, R. 8 W., T. 7 N., about 6 miles West and 4 miles North of Chickasha  
Oklahoma: Washita River Basin.

AREA: 32.54 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED C-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971 P	1.05	1.46	0.01	0.32	4.89	3.35	3.10	3.94	4.07	4.81	0.53	2.66	29.79	
Q	0.0	0.0	0.0	0.0	0.002	0.001	0.002	0.002	0.001	0.034	0.0	0.0	0.043	
STA AV P	0.71	1.04	1.40	2.70	3.45	3.02	1.79	2.75	3.57	1.73	1.59	0.92	24.67	
Q	0.0	0.0	0.0	0.024	0.074	0.061	0.000	0.004	0.004	0.006	0.0	0.018	0.191	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	10-2	0.022	10-2	0.008	10-2	0.013	10-2	0.031	10-2	0.034	10-2	0.034	10-1	0.034
													9-25	0.034
MAXIMUMS FOR PERIOD OF RECORD														
	4-12	0.099	4-12	0.075	5-5	0.115	5-5	0.225	5-4	0.294	5-6	0.375	5-5	0.550
	1967		1967		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: 100% cropland. Entire watershed seeded to wheat in the fall of 1970 and harvested in mid-June 1971. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.31-1 and 69.31-3. Monthly precipitation values obtained from one weighing type rain gage, No. 174. Precipitation and runoff records began May 1, 1962. STA AV based on 10 yr (1962-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.01	0.0	0.34	0.0	0.0	0.0	0.0	0.03		
2	0.09	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	3.36	0.0	0.54		
3	0.56	0.0	0.0	0.0	0.05	0.20	0.0	0.0	0.0	0.02	0.0	0.06		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.72	0.0	0.01	0.01	0.41		
9	0.0	0.0	0.0	0.0	0.45	0.35	0.0	0.0	0.0	0.0	0.0	0.10		
10	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.11		
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.01	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.09	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.77	0.0	0.0	0.0	1.14		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.01		
16	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.98	0.01	0.03	0.0		
18	0.0	0.38	0.0	0.0	0.08	0.0	0.0	0.0	1.11	0.49	0.0	0.0		
19	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.03	0.34	0.0	0.0		
20	0.0	0.01	0.0	0.03	0.0	0.27	0.0	0.0	0.0	0.06	0.0	0.0		
21	0.0	1.03	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.42	0.0		
23	0.0	0.0	0.0	0.0	0.42	0.0	1.64	0.0	0.31	0.0	0.03	0.0		
24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	1.61	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.02	0.0	0.03	0.0	0.2	0.95	0.66	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.05	0.0	0.02	0.65	0.0	0.04	0.0	0.16		
30	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.02	0.04	0.0		
31	0.0	0.0	0.0	0.0	2.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	1.05	1.46	0.01	0.32	4.49	3.35	3.10	3.94	4.07	4.81	0.53	2.66		
STA AV	0.71	1.04	1.40	2.70	3.45	3.02	1.79	2.75	3.57	1.73	1.59	0.92		

NOTES: Values obtained from one weighing type rain gage, No. 174. STA AV based on 10 yr (1962-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASAW, OKLAHOMA WATERSHED C-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.002	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.001	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.003	0.003	0.003	0.0	0.0	0.0	0.0	0.0	0.0			
MEAN	0.0	0.0	0.0	0.0	0.0001	0.0001	0.0001	0.0001	0.0001	0.0015	0.0	0.0			
INCHES	0.0	0.0	0.0	0.0	0.002	0.001	0.002	0.002	0.001	0.034	0.0	0.0			
STA AV	0.0	0.0	0.0	0.024	0.074	0.061	0.000	0.004	0.004	0.006	0.0	0.018			

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.731458. STA AV based on 10 yr (1962-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-3

LOCATION: Grady County, Oklahoma; NE 1/4 sec. 35, R. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 44.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-3											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	Q	0.51	2.01	0.18	0.42	4.73	3.66	1.58	2.90	5.70	5.03	0.59	2.63	29.94										
			0.0	0.041	0.0	0.0	0.961	0.775	0.001	0.206	0.966	1.956	0.0	0.208	5.014										
STA AV	P	Q	0.76	1.24	1.76	2.63	3.56	2.24	2.05	2.97	4.15	2.07	1.00	0.99	25.42										
			0.009	0.012	0.043	0.347	0.587	0.446	0.285	0.519	0.529	0.335	0.084	0.030	3.226										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days									
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1971		5-31	0.556	5-31	0.451	5-31	0.707	10-2	1.174	10-2	1.639	10-2	1.740	10-2	1.741	9-26	1.740								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-31	0.556	5-31	0.451	5-31	0.707	10-2	1.174	10-2	1.639	10-2	1.740	10-2	1.741	8-21	1.768								
1971		1971		1971		1971		1971		1971		1971		1971		1966									

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed disked and moldboard plowed 8-10 inches deep in mid-Dec. 1970. Spring preplanting tillage consisted of disking, spring-tooth harrowing, incorporating fertilizer and herbicide. Entire watershed planted to cotton during early June. Tillage during growing season consisted of rotary hoeing and cultivating with sweep type cultivator as needed. Area irrigated four times, commencing July 7 and ending Sept. 3 with total applied about 10 inches. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.32-1 and 69.32-3. Monthly precipitation data obtained from two recording weighting type rain gauges, No. 186 and Cotton Research Station gauge. Precipitation and runoff records began September 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-3	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.048		
2	0.07	0.0	0.02	0.0	0.0	0.22	0.0	0.0	0.0	3.28	0.0	0.628		
3	0.44	0.0	0.0	0.0	0.04	0.74	0.0	0.0	0.0	0.09	0.0	0.048		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0		
7	0.0	0.01	0.0	0.0	0.0	0.44	0.0	0.03	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.77	0.0	0.03	0.02	0.49		
9	0.0	0.0	0.0	0.0	0.69	0.23	0.14	0.0	0.0	0.0	0.0	0.15		
10	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.15		
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.02	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.72		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	1.57	0.02	0.10		
18	0.0	0.56	0.0	0.0	0.05	0.0	0.0	0.0	1.94	0.27	0.0	0.0		
19	0.0	0.0	0.0	0.04	0.0	0.0	0.03	0.0	0.09	0.80	0.0	0.0		
20	0.0	0.01	0.0	0.04	0.0	1.10	0.0	0.0	0.0	0.06	0.0	0.0		
21	0.0	1.39H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05	0.0	0.0	0.15	0.0	0.0	0.0	0.40	0.0		
23	0.0	0.0	0.0	0.70	0.0	0.0	0.42	0.0	0.26	0.0	0.01	0.0		
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0		
25	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.03H	0.0	0.0	0.0	0.0	0.70	0.0	0.02	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.24		
30	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.02	0.06H	0.0		
31	0.0	0.0	0.0	1.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.51	2.01	0.18	0.42	4.73	3.66	1.58	2.90	5.70	5.03	0.59	2.63		
STA AV	0.76	1.24	1.76	2.63	3.56	2.24	2.05	2.97	4.15	2.07	1.00	0.99		

NOTES: Precipitation values obtained from two recording weighting type rain gauges, No. 186 and Cotton Research Station gauge. STA AV based on 7 yr (1965-71) record period.

CRICKASHA, OKLAHOMA WATERSHED C-3												
1971 BEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1.908	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.744	0.0	0.0	0.0	1.331	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.024	0.0	0.0	0.0	0.056
9	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.001
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.018
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.093	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.152	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.196	0.0	0.0	0.0	0.261
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.050
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0
18	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.342	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.139	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0	0.0	0.023	0.0	0.0
21	0.0	0.064	0.0	0.0	0.0	0.375	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	1.426	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.031	0.0	0.0	0.0	0.0	0.046	0.0	0.0
27	0.0	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.005	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
30	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	1.700	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BEAN	0.0	0.0027	0.0	0.0	0.0577	0.0480	0.0001	0.0124	0.0599	0.1113	0.0	0.0125
INCHES	0.0	0.041	0.0	0.0	0.961	0.775	0.001	0.206	0.966	1.856	0.0	0.208
STA AV	0.009	0.012	0.043	0.347	0.587	0.446	0.285	0.519	0.529	0.335	0.084	0.030

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.537769. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-4

LOCATION: Grady County, Oklahoma: NE 1/4, sec. 35, R. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 29.93 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-4																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971 P	0.50	1.94	0.17	0.46	4.65	4.07	1.55	2.88	5.60	4.88	0.58	2.63	29.91																		
Q	0.0	0.025	0.0	0.0	0.793	0.541	0.0	0.166	0.518	1.720	0.0	0.125	3.888																		
STA AV P	0.77	1.23	1.78	2.59	3.60	2.32	2.06	3.01	4.13	2.06	0.98	1.01	25.54																		
Q	0.003	0.009	0.027	0.189	0.532	0.298	0.274	0.389	0.330	0.278	0.088	0.018	2.432																		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge														Maximum Volume for Selected Time Interval																	
1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days																			
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.																
1971	5-31	0.489	5-31	0.384	5-31	0.623	10-2	1.402	10-2	1.676	10-2	1.695	10-1	1.695	9-25	1.695															
MAXIMUMS FOR PERIOD OF RECORD																															
5-31		0.489		5-31		0.384		5-14		0.671		10-2		1.402		10-2		1.676		10-2		1.695		10-1		1.695		9-25		1.695	
1971				1971				1970				1971				1971				1971				1971				1971			

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed moldboard plowed 8-10 inches deep in early December 1970. Spring preplanting tillage consisted of spring-tooth harrowing, applied 200 lbs/ac of 10-20-10 fertilizer and incorporated by chiseling 6-inches deep in mid-March. Spring-tooth and spike-tooth harrowed in April and early May. Planted cotton May 13-14. Tillage during growing season consisted of rotary hoeing 3-4 times; cultivating 3-4 times with sweep type cultivator as needed. No irrigation water was applied during the 1971 crop year. Stripped cotton and shredded stalks in November. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.33-1 and 69.33-3. Monthly precipitation data obtained from Thiessen weighted rainfall values from two recording weighing type rain gages, Nos. 186 and 187. Precipitation and runoff records began September 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.03													
2	0.07	0.0	0.02	0.0	0.0	0.24	0.0	0.0	0.0	3.21	0.0	0.61													
3	0.43	0.0	0.0	0.0	0.04	0.80	0.0	0.0	0.0	0.08	0.0	0.05													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0													
7	0.0	0.01	0.0	0.0	0.0	0.42	0.0	0.02	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.80	0.0	0.02	0.02	0.50													
9	0.0	0.0	0.0	0.0	0.71	0.24	0.12	0.0	0.0	0.0	0.0	0.15													
10	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.15													
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.02	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.74													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	1.51	0.0	0.01	0.10	0.0													
18	0.0	0.54	0.0	0.0	0.06	0.0	0.0	0.0	1.91	0.25	0.0	0.0													
19	0.0	0.0	0.0	0.07	0.0	0.0	0.04	0.0	0.10	0.80	0.0	0.0													
20	0.0	0.01	0.0	0.04	0.0	1.06	0.0	0.0	0.0	0.05	0.0	0.0													
21	0.0	1.34	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.05	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.66	0.0	0.41	0.0	0.25	0.0	0.01	0.0													
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0													
25	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.44	0.0	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.03	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.23													
30	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.02	0.05	0.0													
31	0.0	0.0	0.0	1.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.50	1.94	0.17	0.46	4.65	4.07	1.55	2.88	5.60	4.88	0.58	2.63													
STA AV	0.77	1.23	1.78	2.59	3.60	2.32	2.06	3.01	4.13	2.06	0.98	1.01													

NOTES: Precipitation values obtained from two weighing recording type rain gages, Nos. 186 and 187. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED C-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	1.624	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.538	0.0	0.0	0.0	0.508	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.054	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.147	0.0	0.0	0.0	0.108
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.018	0.0	0.037
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0 T
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.090	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.023	0.0	0.0	0.0	0.071	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.553	0.0	0.0	0.0
25	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.003	0.0	0.0
27	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.001	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.978	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0011	0.0	0.0	0.0322	0.0227	0.0	0.0067	0.0217	0.0698	0.0	0.0051
INCHES	0.0	0.025	0.0	0.0	0.793	0.541	0.0	0.166	0.518	1.720	0.0	0.125
STA AV	0.003	0.009	0.027	0.189	0.532	0.298	0.274	0.389	0.330	0.278	0.084	0.018

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.795248. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 12.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED C-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
P	0.49	1.91	0.17	0.51	8.60	8.08	1.55	2.89	5.46	4.81	0.56	2.65	29.68	
1971	Q 0.0	0.0	0.0	0.0	0.171	0.166	0.0	0.0	0.431	1.646	0.0	0.009	2.422	
STA A	P 0.76	1.20	1.75	2.58	3.46	2.31	1.85	3.75	2.02	0.95	1.00	25.62		
Q	0.0	0.0	0.065	0.208	0.116	0.066	0.003	0.057	0.166	0.237	0.010	0.001	0.930	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge			1 Hour			2 Hours			Maximum Volume for Selected Time Interval			1 Day		
Date	Date	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date	Date	Vol.	Date
1971	10-2	0.593	10-2	0.546	10-2	0.881	10-2	1.581	10-2	1.632	10-2	1.645	10-1	1.645
MAXIMUMS FOR PERIOD OF RECORD														
	10-2	0.593	10-2	0.546	10-2	0.881	10-2	1.581	10-2	1.632	10-2	1.645	10-1	1.645
1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971

NOTES: Watershed conditions: 100% cropland, planted 80 lbs/ac of Triumph wheat October 15, 1970. Applied on surface 100 lbs/ac of 33-00-00 fertilizer January 29, 1971. Harvested wheat grain June 11, 1971. Disked 6-7 inches deep June 15 and July 19. Spring-tooth harrowed Aug. 18, Sept. 30 and Oct. 11, 4-6 inches deep. Planted 75 lbs/ac of Triumph with 100 lbs/ac of 12-24-12 fertilizer. There was no grazing by livestock. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, USDA Misc. Pub. 1216, p. 69.34-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.03		
2	0.07	0.0	0.02	0.0	0.0	0.27	0.0	0.0	0.0	3.15	0.0	0.61		
3	0.42	0.0	0.0	0.0	0.04	0.83	0.0	0.0	0.0	0.07	0.0	0.05		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0		
7	0.0	0.01	0.0	0.0	0.0	0.39	0.0	0.02	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.81	0.0	0.02	0.03	0.52		
9	0.0	0.0	0.0	0.0	0.73	0.25	0.10	0.0	0.0	0.0	0.0	0.14		
10	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.15		
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.04	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.76		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.42	0.01	0.10	0.0		
18	0.0	0.54	0.0	0.0	0.06	0.0	0.0	1.99	0.28	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.11	0.0	0.0	0.05	0.0	0.09	0.80	0.0	0.0		
20	0.0	0.01	0.0	0.04	0.0	1.04	0.0	0.0	0.0	0.05	0.0	0.0		
21	0.0	1.31	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05	0.0	0.0	0.17	0.0	0.0	0.0	0.37	0.0		
23	0.0	0.0	0.0	0.0	0.63	0.0	0.41	0.0	0.24	0.0	0.01	0.0		
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.44	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.03	0.0	0.0	0.0	0.0	0.70	0.03	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.04	0.0	0.0	0.22	0.0		
30	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.03	0.05	0.0		
31	0.0				1.61			0.0				0.0		
TOTAL	0.49	1.91	0.17	0.51	8.60	4.08	1.55	2.89	5.46	4.81	0.56	2.65		
STA AV	0.76	1.20	1.75	2.58	3.46	2.31	1.85	3.75	4.05	2.02	0.95	1.00		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGES (cfs) CHICKASHA, OKLAHOMA WATERSHED C-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.757	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.073	0.0	0.0	0.0	0.128	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.027	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.208	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.092	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0030	0.0030	0.0	0.0	0.0077	0.0286	0.0	0.0001
INCHES	0.0	0.0	0.0	0.0	0.171	0.166	0.0	0.0	0.431	1.646	0.0	0.009
STA AV	0.0	0.0	0.065	0.208	0.116	0.066	0.003	0.057	0.166	0.237	0.010	0.001

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.859504. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 13.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA		WATERSHED C-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
P	0.49	1.93	0.77	0.53	4.60	4.08	1.55	2.51	5.46	4.82	0.56	2.65	29.75			
1971 Q	0.0	0.0	0.0	0.0	0.169	0.178	0.0	0.0	0.851	1.763	0.0	0.078	3.039			
STA AV P	0.76	1.20	1.73	2.56	3.46	2.30	1.84	3.75	4.04	2.03	0.95	1.00	25.59			
Q	0.002	0.012	0.116	0.193	0.185	0.084	0.005	0.124	0.264	0.263	0.032	0.011	1.251			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	10- 2	0.877	10- 2	0.776	10- 2	1.123	10- 2	1.695	10- 2	1.761	10- 2	1.763	10- 1	1.763	9-25	1.764
MAXIMIMS FOR PERIOD OF RECORD																
10- 2	0.877	10- 2	0.776	10- 2	1.123	10- 2	1.695	10- 2	1.761	10- 2	1.763	10- 1	1.763	9-25	1.764	
1971		1971		1971		1971		1971		1971		1971		1971		

NOTES: Watershed conditions: 100% cropland, planted to wheat in fall of 1970 and harvested for grain in June 1971. Watershed was moldboard plowed soon after harvest and remained in rough condition until about mid-Aug. 1971, when watershed was disked and spring-tooth harrowed, in preparation for seeding to wheat. Watershed was freshly spring-tooth and spike-tooth harrowed just prior to seeding wheat in mid-Oct. 1971. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA River Pub. 1216, p. 69.35-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED C-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.03		
2	0.07	0.0	0.02	0.0	0.0	0.27	0.0	0.0	0.0	3-15	0.0	0.61		
3	0.42	0.0	0.0	0.0	0.04	0.83	0.0	0.0	0.0	0.07	0.0	0.05		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0		
7	0.0	0.01	0.0	0.0	0.0	0.39	0.0	0.02	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.81	0.0	0.02	0.03	0.52		
9	0.0	0.0	0.0	0.0	0.73	0.25	0.09	0.0	0.0	0.0	0.0	0.14		
10	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.15		
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.05	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.76		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.42	0.01	0.10	0.0		
18	0.0	0.55	0.0	0.0	0.06	0.0	0.0	0.0	1.89	0.24	0.0	0.0		
19	0.0	0.0	0.0	0.12	0.0	0.0	0.05	0.0	0.09	0.80	0.0	0.0		
20	0.0	0.01	0.0	0.04	0.0	1.05	0.0	0.0	0.0	0.05	0.0	0.0		
21	0.0	1.32	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05	0.0	0.0	0.17	0.0	0.0	0.0	0.37	0.0		
23	0.0	0.0	0.0	0.0	0.63	0.0	0.41	0.0	0.24	0.0	0.01	0.0		
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	0.45	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.03	0.0	0.0	0.0	0.0	0.70	0.03	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.22		
30	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.03	0.05	0.0		
31	0.0	0.0	0.0	1.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.49	1.93	0.17	0.53	4.60	4.08	1.55	2.91	5.46	4.82	0.56	2.65		
STA AV	0.76	1.20	1.73	2.56	3.46	2.30	1.84	3.75	4.04	2.03	0.95	1.00		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based 7 yr (1965-71) record period.

CHICKASAW, OKLAHOMA WATERFRESH C-6												
1971 MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.887	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.077	0.0	0.0	0.0	0.077	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.072	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.382	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.092	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0030	0.0032	0.0	0.0	0.0155	0.0311	0.0	0.0014
INCHES	0.0	0.0	0.0	0.0	0.169	0.178	0.0	0.0	0.851	1.763	0.0	0.078
STA AV	0.002	0.012	0.116	0.193	0.145	0.084	0.005	0.124	0.264	0.263	0.032	0.011

NOTES: To convert discharge in CFS to I8/DAY, multiply by 1.830896. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-7

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 26.52 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												CHICKASHA, OKLAHOMA WATERSHED C-7	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
P	0.50	1.96	0.18	0.52	4.62	4.10	1.55	2.93	5.44	4.86	0.55	2.66	29.87
Q	0.0	0.013	0.0	0.0	0.371	0.357	0.0	0.011	1.382	1.688	0.0	0.052	3.875
STA AV	0.76	1.19	1.71	2.53	3.44	2.29	1.83	3.73	4.03	2.01	0.94	0.99	25.45
Q	0.0	0.016	0.012	0.327	0.232	0.232	0.128	0.371	0.370	0.311	0.035	0.007	2.042

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS											
Maximum Discharge				Maximum Volume for Selected Time Interval							
1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days					
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1971 10-2 0.668	10-2 0.523	10-2 0.788	10-2 1.379	10-2 1.596	10-2 1.607	10-1 1.607	9-25 1.607				

MAXIMUMS FOR PERIOD OF RECORD											
4-12 0.957	4-12 0.637	4-12 0.824	10-2 1.379	10-2 1.596	10-2 1.607	10-1 1.607	4-9 1.634				
1967	1967	1971	1971	1971	1971	1967					

NOTES: Watershed conditions: 100% cropland. North portion was planted to alfalfa in fall of 1970. South portion of watershed was planted to grain and forage sorghams and soy beans. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, USDA Misc. Pub. 1216, pp. 69-36-1 and 69-36-3. Monthly precipitation data from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED C-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.04
2	0.07	0.0	0.02	0.0	0.0	0.28	0.0	0.0	0.0	3.15	0.0	0.0	0.60
3	0.43	0.0	0.0	0.0	0.04	0.82	0.0	0.0	0.0	0.08	0.0	0.0	0.04
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0
7	0.0	0.01	0.0	0.0	0.0	0.38	0.0	0.02	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.81	0.0	0.02	0.03	0.0	0.52
9	0.0	0.0	0.0	0.0	0.73	0.26	0.09	0.0	0.0	0.0	0.0	0.0	0.14
10	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.15
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.06	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.76
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.40	0.01	0.10	0.0	0.0
18	0.0	0.56	0.0	0.0	0.06	0.0	0.0	0.0	1.90	0.28	0.0	0.0	0.0
19	0.0	0.0	0.0	0.13	0.0	0.0	0.05	0.0	0.09	0.81	0.0	0.0	0.0
20	0.0	0.01	0.0	0.04	0.0	1.06	0.0	0.0	0.0	0.06	0.0	0.0	0.0
21	0.0	1.32	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.04	0.0	0.0	0.17	0.0	0.0	0.0	0.35	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.23	0.0	0.01	0.0	0.0
24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	1.79	0.0	0.0	0.0	0.0
25	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.04	0.0	0.0	0.0	0.0	0.69	0.03	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.08	0.02	0.0	0.04	0.0	0.0	0.0	0.0	0.23	0.0
30	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.03	0.06	0.0	0.0
31	0.0	0.0	0.0	0.0	1.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.50	1.96	0.18	0.52	4.62	4.10	1.55	2.93	5.44	4.86	0.55	2.66	
STA AV	0.76	1.19	1.71	2.53	3.44	2.29	1.83	3.73	4.03	2.01	0.94	0.99	

NOTES: Precipitation values obtained from two recording weighting type rain gages, Nos. 185 and 187. STA AV based 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATESBED C-7											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.528	0.0
3	0.0	0.0	0.0	0.0	0.0	0.273	0.0	0.0	0.0	0.267	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.659	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.071	0.0
20	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.005	0.0
21	0.0	0.015	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.878	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0
26	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.014	0.0
27	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.410	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0005	0.0	0.0	0.0133	0.0133	0.0	0.0004	0.0513	0.0607	0.0
INCHES	0.0	0.013	0.0	0.0	0.371	0.357	0.0	0.011	1.382	1.688	0.0
STA AV	0.0	0.016	0.012	0.327	0.232	0.232	0.128	0.371	0.370	0.311	0.035

NOTES: To convert discharge in CFS to I8/DAY, multiply by 0.897498. STA AV based on 7 yr (1965-71) record period.

## CHICKASHA, OKLABOMA WATERSHED C-8

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, E. 7 W., T. 7 N., about 3-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.28 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLABOMA		WATERSHED C-8	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1971 P	Q	0.52	2.05	0.17	0.56	4.90	4.07	1.69	3.16	5.68	5.34	0.60	2.70	31.44		
	Q	0.0	0.000	0.0	0.0	0.001	0.000	0.0	0.001	0.140	1.459	0.0	0.001	1.602		
STA AV P	Q	0.76	1.23	1.73	2.43	3.51	2.29	1.89	3.72	4.00	2.12	0.96	1.01	25.63		
	Q	0.0	0.000	0.011	0.077	0.025	0.013	0.067	0.186	0.147	0.209	0.0	0.000	0.735		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge				Maximum Volume for Selected Time Interval												
Date		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date		Date		Date		Date		Date		Date		Date		Date		
1971	10- 2	0.858	10- 2	0.693	10- 2	0.998	10- 2	1.405	10- 2	1.458	10- 2	1.458	10- 1	1.458	9-25 1.458	
MAXIMUMS FOR PERIOD OF RECORD																
10- 2	0.858	10- 2	0.693	10- 2	0.998	10- 2	1.405	10- 2	1.458	10- 2	1.458	10- 1	1.458	9-25 1.458		
1971		1971		1971		1971		1971		1971		1971		1971		

NOTES: Watershed conditions: 100% cropland, entire watershed was planted to wheat in mid-Oct. 1970 and harvested for grain in mid-June 1971. Watershed was moldboard plowed 8-10 inches deep in late June 1971. Area remained in rough condition until mid-Aug. 1971 when watershed was disked and spring-tooth harrowed in preparation for seedling to wheat. Watershed was seeded to wheat in mid-Oct. 1971. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.37-1. Maps - revised composite, p. 69.7-21; topography, p. 69.37-5 of foregoing reference. Monthly precipitation obtained from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 185 and 186. Precipitation and runoff records began April 1, 1965. STA AV based on 7 yr (1965-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, OKLA.

DAILY PRECIPITATION (inches)													CHICKASHA, OKLABOMA WATERSHED C-8	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.04		
2	0.07	0.0	0.02	0.0	0.0	0.31	0.0	0.0	0.0	3.45	0.0	0.60		
3	0.45	0.0	0.0	0.0	0.04	0.77	0.0	0.0	0.0	0.10	0.0	0.04		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0		
7	0.0	0.01	0.0	0.0	0.0	0.37	0.0	0.02	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.83	0.0	0.03	0.04	0.49		
9	0.0	0.0	0.0	0.0	0.79	0.28	0.08	0.0	0.0	0.0	0.0	0.14		
10	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.16		
11	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.06	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0	0.79		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	1.47	0.02	0.10	0.0	0.0		
18	0.0	0.61	0.0	0.0	0.07	0.0	0.0	0.0	1.98	0.27	0.0	0.0		
19	0.0	0.0	0.0	0.13	0.0	0.0	0.05	0.0	0.08	0.85	0.0	0.0		
20	0.0	0.01	0.0	0.04	0.0	0.97	0.0	0.0	0.0	0.07	0.0	0.0		
21	0.0	1.36	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05	0.0	0.0	0.20	0.0	0.0	0.0	0.38	0.0		
23	0.0	0.0	0.0	0.0	0.62	0.0	0.46	0.0	0.24	0.0	0.02	0.0		
24	0.0	0.03	0.0	0.0	0.0	0.0	0.0	1.87	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	0.51	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.03	0.0	0.0	0.0	0.0	0.74	0.93	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.10	0.03	0.0	0.0	0.04	0.0	0.0	0.0	0.25		
30	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.04	0.06	0.0		
31	0.0	0.0	0.0	0.0	1.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.52	2.05	0.17	0.56	4.90	4.07	1.69	3.16	5.68	5.34	0.60	2.70		
STA AV	0.76	1.23	1.73	2.43	3.51	2.29	1.89	3.72	4.00	2.12	0.96	1.01		

NOTES: Precipitation values obtained from two recording type rain gages, Nos. 185 and 186. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASHA, OKLAHOMA		WATERBED C-8	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.583	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.128	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.136	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0053	0.0539	0.0	0.0			
INCHES	0.0	0.000	0.0	0.0	0.001	0.000	0.0	0.001	0.140	1.859	0.0	0.001			
STA AV	0.0	0.000	0.011	0.077	0.025	0.013	0.067	0.186	0.147	0.209	0.0	0.000			

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.872495. STA AV based on 7 yr (1965-71) record period.

## CHICKASAW, OKLAHOMA WATERSHED R-1

LOCATION: Caddo County, Oklahoma; NE 1/4, sec. 21, T. 8 N., R. 9 W., about 4-3/4 miles North and 3-1/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 17.76 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												CHICKASAW, OKLAHOMA WATERSHED R-1	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	1.01	1.30	0.02	1.08	4.42	2.92	2.44	3.05	4.78	4.53	0.66	2.95	29.16
Q	0.0	0.0	0.0	0.001	0.025	0.002	0.002	0.004	0.006	0.009	0.0	0.004	0.053
STA AV P	0.65	1.01	1.51	3.10	3.57	4.00	1.55	3.11	4.17	1.97	1.64	1.00	27.28
Q	0.0	0.0	0.0	0.016	0.016	0.037	0.000	0.004	0.006	0.002	0.003	0.000	0.084

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-2, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. The watershed was fertilized and sprig-planted to beranda in spring of 1970. Because of unfavorable weather conditions, a poor stand resulted. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.38-1 and 69.38-2. Precipitation data obtained from recording rain gage No. 189. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 10 yr (1962-71) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASAW, OKLAHOMA WATERSHED R-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.09	
2	0.22	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0	1.95	0.0	0.50		
3	0.79	0.0	0.0	0.0	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.21		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.02	0.03	0.23		
9	0.0	0.0	0.0	0.0	0.49	0.35	0.0	0.0	0.0	0.0	0.0	0.09		
10	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.08		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.04	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0	1.32		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.33	0.01	0.01	0.0		
18	0.0	0.29	0.0	0.0	0.10	0.0	0.0	0.0	0.91	0.72	0.0	0.0		
19	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.04	0.30	0.0	0.0		
20	0.0	0.0	0.0	0.02	0.0	0.30	0.0	0.0	0.0	0.10	0.0	0.0		
21	0.0	0.95	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.54	0.0		
23	0.0	0.0	0.0	0.0	0.46	0.0	0.29	0.0	0.15	0.0	0.02	0.0		
24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	2.35	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.67	0.67	0.0	0.0	0.0	0.0	1.03	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.44	0.0	0.31	0.0	0.26		
30	0.0	0.0	0.0	0.0	0.37	0.04	0.0	0.0	0.0	0.09	0.06	0.0		
31	0.0	0.0	0.0	2.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	1.01	1.30	0.02	1.08	4.42	2.92	2.44	3.05	4.78	4.53	0.66	2.95		
STA AV	0.65	1.01	1.51	3.10	3.57	4.00	1.55	3.11	4.17	1.97	1.64	1.00		

NOTES: Precipitation values obtained from one recording rain gage, No. 189. STA AV based on 10 yr (1962-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASAW, OKLAHOMA		WATERSHED B-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001			
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.002			
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.001	0.0	0.0			
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.001	0.0 T	0.0	0.0	0.0	0.0	0.001	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0			
29	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0			
30	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0		0.0		0.019		0.0	0.0		0.0		0.0			
MEAN	0.0	0.0	0.0	0.0	0.0006	0.0001	0.0	0.0001	0.0001	0.0002	0.0	0.0001			
INCHES	0.0	0.0	0.0	0.001	0.025	0.002	0.002	0.004	0.006	0.009	0.0	0.004			
STA AV	0.0	0.0	0.0	0.016	0.016	0.037	0.000	0.004	0.006	0.002	0.003	0.000			

NOTES: To convert discharge in CFS to IN/DAY, multiply by 1.340183. STA AV based on 10 yr (1962-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-2

LOCATION: Caddo County, Oklahoma: NW 1/4, sec. 22, T. 8 N., R. 9 W., about 4-1/2 miles North and 2-3/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 24.08 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												CHICKASHA, OKLAHOMA WATERSHED R-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1971 P	1.06	1.22	0.01	1.16	4.01	2.71	2.25	2.84	4.20	3.97	0.66	2.51	26.60
Q	0.0	0.0	0.0	0.0	0.034	0.020	0.004	0.001	0.006	0.010	0.0	0.003	0.078
STA AV P	0.61	0.96	1.35	3.03	3.44	3.90	1.49	2.99	3.98	1.87	1.59	0.94	26.16
Q	0.001	0.0	0.002	0.049	0.031	0.046	0.001	0.028	0.030	0.008	0.009	0.004	0.209

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-1, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.39-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 190. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 10 yr (1962-71) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.07
2	0.24	0.0	0.01	0.0	0.0	0.05	0.0	0.0	0.0	1.76	0.0	0.0	0.38
3	0.82	0.0	0.0	0.0	0.03	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.15
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.69	0.0	0.0	0.03	0.0	0.19
9	0.0	0.0	0.0	0.0	0.50	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.07
10	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.08
11	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.03	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	1.14
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.01	0.01	0.0	0.0
18	0.0	0.30	0.0	0.0	0.08	0.0	0.0	0.0	0.76	0.66	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.02	0.23	0.0	0.0	0.0
20	0.0	0.0	0.0	0.03	0.0	0.18	0.0	0.0	0.0	0.07	0.0	0.0	0.0
21	0.0	0.88	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.54	0.0	0.0
23	0.0	0.0	0.0	0.0	0.42	0.0	0.26	0.0	0.12	0.0	0.02	0.0	0.0
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	2.11	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.74	0.64	0.0	0.0	0.0	0.0	0.86	0.0	0.0
27	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.03	0.0	0.06	0.0	0.0	1.09	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.51	0.0	0.29	0.0	0.0	0.28
30	0.0	0.0	0.0	0.0	0.31	0.02	0.0	0.0	0.0	0.09	0.06	0.0	0.0
31	0.0	0.0	0.0	0.0	1.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.06	1.22	0.01	1.16	4.01	2.71	2.25	2.84	4.20	3.97	0.66	2.51	
STA AV	0.61	0.96	1.35	3.03	3.44	3.90	1.49	2.99	3.98	1.87	1.59	0.94	

NOTES: Precipitation values obtained from one recording rain gage, No. 190. STA AV based on 10 yr (1962-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													CHICKASHA, OKLAHOMA WATERSHED B-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.003		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0	0.0	0.0	0.0	0.0011	0.0007	0.0001	0.0	0.0002	0.0003	0.0	0.0001		
INCHES	0.0	0.0	0.0	0.0	0.034	0.020	0.004	0.001	0.006	0.010	0.0	0.003		
STA AV	0.001	0.0	0.002	0.049	0.031	0.046	0.001	0.028	0.030	0.008	0.009	0.004		

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.988441. STA AV based on 10 yr (1962-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-3

LOCATION: Caddo County, Oklahoma: NE 1/4, sec/ 21. T. 8 N., R. 9 W., about 4-1/2 miles North and 3-1/4 miles West of Verden, Oklahoma: Washita River Basin.

AREA: 25.84 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												
CHICKASHA, OKLAHOMA WATERSHED R-3												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1971	P 1.02	1.18	0.01	1.24	3.92	2.58	2.21	2.92	4.09	4.00	0.64	2.47
	Q 0.0	0.0	0.0	0.0	0.018	0.001	0.001	0.001	0.004	0.004	0.0	0.025
STA AV	P 0.60	0.96	1.36	3.01	3.36	3.86	1.47	2.97	3.89	1.87	1.56	0.91
	Q 0.0	0.0	0.001	0.020	0.012	0.015	0.000	0.012	0.015	0.004	0.004	0.001
												0.084

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-1, R-2 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climar grass species, however, the range condition class is poor. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.40-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 191. Precipitation records began Jan. 1, 1962. STA AV based on 10 yr (1962-71) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)												
CHICKASHA, OKLAHOMA WATERSHED R-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.06
2	0.21	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	1.82	0.0	0.40
3	0.81	0.0	0.0	0.0	0.03	0.12	0.0	0.0	0.0	0.0	0.0	0.17
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.02	0.03	0.17
9	0.0	0.0	0.0	0.0	0.49	0.29	0.0	0.0	0.0	0.0	0.0	0.06
10	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.09
11	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.02	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	1.15
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	0.01	0.01	0.0
18	0.0	0.27	0.0	0.0	0.09	0.0	0.0	0.75	0.68	0.0	0.0	0.0
19	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.02	0.24	0.0	0.0	0.0
20	0.0	0.0	0.0	0.04	0.0	0.10	0.0	0.0	0.0	0.08	0.0	0.0
21	0.0	0.87	0.0	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.53	0.0
23	0.0	0.0	0.0	0.0	0.43	0.0	0.24	0.0	0.11	0.0	0.02	0.0
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	2.07	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.87	0.59	0.0	0.0	0.0	0.0	0.84	0.0	0.0
27	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.03	0.0	0.06	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.47	0.0	0.27	0.0	0.22
30	0.0	0.0	0.0	0.0	0.33	0.03	0.0	0.0	0.0	0.08	0.05	0.0
31	0.0	0.0	0.0	0.0	1.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.02	1.18	0.01	1.24	3.92	2.58	2.21	2.92	4.09	4.00	0.64	2.47
STA AV	0.60	0.96	1.36	3.01	3.36	3.86	1.47	2.97	3.89	1.87	1.56	0.91

NOTES: Precipitation values obtained from one recording rain gage, No. 191. STA AV based on 10 yr (1962-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													CHICKASAW, OKLAHOMA		WATERBED #3	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0				
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0				
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
31	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MEAN	0.0	0.0	0.0	0.0	0.0006	0.0	0.0	0.0	0.0001	0.0001	0.0	0.0				
INCHES	0.0	0.0	0.0	0.0	0.018	0.001	0.001	0.001	0.004	0.004	0.0	0.0				
STA AV	0.0	0.0	0.001	0.020	0.012	0.015	0.000	0.012	0.015	0.004	0.004	0.001				

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.921117. STA AV based on 10 yr (1962-71) record period.

## CHICKASAW, OKLAHOMA WATERSHED R-4

LOCATION: Caddo County, Oklahoma; NW 1/4, sec. 22, T. 8 N. E. 9 E., about 4-1/2 miles North and 2-1/2 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 18.12 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASAW, OKLAHOMA WATERSHED R-4													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
P		1.09	1.40	0.01	1.27	4.70	2.89	2.36	3.10	4.93	4.32	0.56	2.86	25.49													
1971	Q	0.0	0.0	0.0	0.0	0.023	0.0	0.001	0.001	0.002	0.002	0.0	0.0	0.029													
STA AV	P	0.64	0.94	1.34	3.12	3.65	4.08	1.49	3.06	4.15	1.97	1.60	0.96	26.99													
	Q	0.0	0.0	0.0	0.061	0.019	0.030	0.000	0.019	0.016	0.004	0.004	0.0	0.153													

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as watersheds R-1, R-2 and R-3. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses, and some climax grass species, however, the range condition class is poor. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 65, 41-1 and 65, 41-2. Precipitation data obtained from recording rain gage No. 192. Precipitation records began Jan. 1, 1962. STA AV based on 10 yr (1962-71) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasaw, Okla.

1971		DAILY PRECIPITATION (inches)										CHICKASAW, OKLAHOMA WATERSHED R-4	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.05
2	0.23	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	1.75	0.0	0.0	0.38
3	0.86	0.0	0.0	0.0	0.0	0.03	0.13	0.0	0.0	0.0	0.0	0.0	0.18
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.02	0.02	0.23
9	0.0	0.0	0.0	0.0	0.0	0.56	0.37	0.0	0.0	0.0	0.0	0.0	0.09
10	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.08
11	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.02	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.74	0.0	0.0	0.0	1.40
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.01	0.01	0.0
18	0.0	0.39	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.98	0.67	0.0	0.0
19	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.04	0.30	0.0	0.0
20	0.0	0.01	0.0	0.03	0.0	0.12	0.0	0.0	0.0	0.0	0.06	0.0	0.0
21	0.0	0.95	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.46	0.0
23	0.0	0.0	0.0	0.0	0.49	0.0	0.26	0.0	0.0	0.16	0.0	0.02	0.0
24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.41	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.85	0.61	0.0	0.0	0.0	0.0	1.08	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.04	0.0	0.0	0.06	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.55	0.0	0.0	0.0	0.31	0.0	0.30
30	0.0	0.0	0.0	0.0	0.34	0.03	0.0	0.0	0.0	0.0	0.12	0.05	0.0
31	0.0					2.49							0.0
TOTAL		1.09	1.40	0.01	1.27	4.70	2.89	2.36	3.10	4.93	4.32	0.56	2.86
STA AV		0.64	0.94	1.34	3.12	3.65	4.08	1.49	3.06	4.15	1.97	1.60	0.96

NOTES: Precipitation obtained from one recording rain gage, No. 192. STA AV based on 10 yr (1962-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												CHICKASHA, OKLAHOMA WATERSHED R-4											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0006	0.0	0.0	0.0	0.0001	0.0	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.023	0.0	0.001	0.001	0.002	0.002	0.0	0.0											
STA AV	0.0	0.0	0.0	0.061	0.019	0.030	0.000	0.019	0.016	0.004	0.004	0.0											

NOTES: To convert discharge in CFS to IN/DAY, multiply by 1.313557. STA AV based on 10 yr (1962-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 8 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 23.72 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED R-5													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	0.57	1.74	0.15	0.57	4.16	5.09	1.86	3.90	6.50	5.67	0.56	2.97	33.74														
Q	0.0	0.0	0.0	0.0	0.0	0.312	0.0	0.003	0.204	1.010	0.0	0.256	1.784														
STA AV P	0.84	1.23	1.72	2.67	4.22	2.95	2.69	2.80	4.68	2.64	1.26	1.26	28.97														
Q	0.0	0.030	0.046	0.215	0.142	0.154	0.055	0.000	0.085	0.171	0.004	0.043	0.946														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for selected time interval													
1 Hour														6 Hours													
2 Hours														12 hours													
1 Day														2 Days													
8 Days																											
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		
1971	10-2	0.426	10-2	0.303	10-2	0.444	10-2	0.821	10-2	1.007	10-2	1.010	10-1	1.010	9-25	1.010											
MAXIMUMS FOR PERIOD OF RECORD																											
4-12	0.879	4-12	0.577	4-12	0.721	10-2	0.821	10-2	1.007	10-2	1.010	10-1	1.010	4-9	1.066												
1967	1967	1967	1967	1967	1967	1971	1971	1971	1971	1971	1971	1971	1971	1967	1967												

NOTES: Watershed conditions: 100% rangeland, native grass rangeland, continuously grazed by beef cattle during recent years. Range condition class during 1971 was good, however, entire area was slightly overgrazed during the spring and summer. The vegetative cover in early December 1970, based on 25 clipped samples uniformly spaced, averaged 1,660 pounds of standing grass, 300 pounds of weeds, and 1,535 pounds of mulch per acre. Prior to Oct. 1970 this watershed was within the same pasture area as Watershed R-6, however, was subjected to a slightly heavier grazing rate. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 69.42-1; maps - topography, 1966, p. 69.42-3 of foregoing reference; revised composite, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 195 and 196. Precipitation and runoff records began July 1, 1966. STA AV based on 6 yr (1966-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-5												
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.02												
2	0.08	0.0	0.03	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.16												
3	0.49	0.0	0.0	0.0	0.0	0.02	0.81	0.0	0.0	0.0	0.15	0.0	0.12												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20												
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.05	0.0	0.0	0.0												
7	0.0	0.04	0.0	0.0	0.0	0.0	0.82	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	0.02	0.43	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.85	0.19	0.02	0.0	0.0	0.0	0.0	0.14												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.19												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.07	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.32	0.0	0.0	0.0	1.01	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.01												
16	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.82	0.0	0.10	0.0												
18	0.0	0.19	0.0	0.0	0.0	0.10	0.0	0.0	0.0	2.36	0.43	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.10	0.66	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.08	0.0	0.52	0.0	0.0	0.0	0.15	0.0	0.0												
21	0.0	1.44	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.14	0.0	0.0	0.0	0.36	0.0												
23	0.0	0.0	0.0	0.0	0.0	0.97	0.0	0.63	0.0	0.27	0.0	0.02	0.0												
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0												
25	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.03	0.99	0.0	0.0	0.0	0.0	0.65	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.01	0.0	0.0	0.37	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.30	0.01	0.0	0.0	0.0	0.02	0.06	0.0												
31	0.0	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.57	1.74	0.15	0.57	4.16	5.09	1.86	3.90	6.50	5.67	0.56	2.97													
STA AV	0.84	1.23	1.72	2.67	4.22	2.95	2.69	2.80	4.68	2.64	1.26	1.26													

NOTES: Precipitation obtained from Thiessen weighted values from two gages, Nos. 195 and 196. STA AV based on 6 yr (1966-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED R-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.771	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.135	0.0	0.0	0.0	0.235	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.169	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.233
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.022
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0086	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.117	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0103	0.0	0.0001	0.0068	0.0325	0.0	0.0082
INCBS	0.0	0.0	0.0	0.0	0.0	0.312	0.0	0.003	0.204	1.010	0.0	0.256
STA AV	0.0	0.030	0.046	0.215	0.142	0.154	0.055	0.000	0.085	0.171	0.004	0.043

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.003842. STA AV based on 6 yr (1966-71) record period.

## CHICKASAW, OKLAHOMA WATERSHED R-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 8-1/2 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.22 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASAW, OKLAHOMA WATERSHED R-6															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																
1971	P	0.52	1.72	0.14	0.60	4.07	5.01	1.88	3.85	6.56	5.41	0.56	2.91	33.23															
	Q	0.0	0.013	0.0	0.0	0.002	0.175	0.0	0.029	0.307	0.982	0.0	0.141	1.649															
STA AV	P	0.84	1.26	1.72	2.62	4.30	2.92	2.68	2.81	4.73	2.57	1.26	1.25	28.96															
	Q	0.0	0.018	0.031	0.226	0.172	0.097	0.042	0.011	0.103	0.169	0.007	0.023	0.898															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
Maximum Discharge														Maximum Volume for Selected Time Interval															
Date		Rate		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.		Date		Vol.			
10-2		0.452		10-2		0.309		10-2		0.448		10-2		0.850		10-2		0.979		10-2		0.979		10-1		0.979		9-25 0.979	
MAXIMUMS FOR PERIOD OF RECORD																													
4-12		1.066		4-12		0.658		4-12		0.808		4-12		0.879		10-2		0.979		10-2		0.979		4-11		0.989		4-10 1.098	
1967				1967				1967				1967		1971		1971		1971				1971		1967		1967			

NOTES: Watershed conditions: 100% rangeland, native grass continuously grazed by beef cattle during recent years. Range condition class during the year was good to excellent, however, entire area was slightly overgrazed throughout the year. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, averaged 2,500 pounds of standing grass, 200 pounds of weeds, and 2,700 pounds of mulch. This watershed was in the same pasture area as watershed R-5, however, was subjected to a slightly lighter grazing rate. For general description and map of watershed, see Hydrologic data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.43-1 and 69.43-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. Precipitation and runoff records began July 1, 1966. STA AV based on 6 yr (1966-71) record period. For long-term precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1971 DAILY PRECIPITATION (inches)													CHICKASAW, OKLAHOMA WATERSHED R-6												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.03													
2	0.08	0.0	0.02	0.0	0.0	0.82	0.0	0.0	0.0	3.39	0.0	0.50													
3	0.44	0.0	0.0	0.0	0.01	0.83	0.0	0.0	0.0	0.14	0.0	0.12													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.04	0.0	0.0	0.0													
7	0.0	0.04	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.03	0.02	0.42													
9	0.0	0.0	0.0	0.0	0.83	0.19	0.0	0.0	0.0	0.0	0.12	0.0													
10	0.0	0.0	0.0	0.0	0.01	0.40	0.0	0.0	0.0	0.0	0.0	0.20													
11	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.08	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.25	0.0	0.0	0.0	0.97													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.16	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.80	0.0	0.10	0.0													
18	0.0	0.17	0.0	0.0	0.09	0.0	0.0	0.0	2.40	0.41	0.0	0.0													
19	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.10	0.66	0.0	0.0													
20	0.0	0.0	0.0	0.08	0.0	0.51	0.0	0.0	0.0	0.16	0.0	0.0													
21	0.0	1.44	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.05	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.36													
23	0.0	0.0	0.0	0.0	0.97	0.0	0.60	0.0	0.28	0.0	0.03	0.0													
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.0													
25	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.02	0.94	0.0	0.0	0.0	0.0	0.60	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.35													
30	0.0	0.0	0.0	0.0	0.30	0.02	0.0	0.0	0.0	0.02	0.05	0.0													
31	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.52	1.72	0.14	0.60	4.07	5.01	1.88	3.85	6.56	5.41	0.56	2.91													
STA AV	0.84	1.26	1.72	2.62	4.30	2.92	2.68	2.81	4.73	2.57	1.26	1.25													

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. STA AV based on 6 yr (1966-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)													CHICKASAW, OKLAHOMA WATERSHED R-6			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.936	0.0				
3	0.0	0.0	0.0	0.0	0.0	0.103	0.0	0.0	0.0	0.104	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.072	0.0	0.0	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.0	0.0	0.0				
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0				
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0				
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.151	0.0	0.0	0.0				
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0				
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
21	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.194	0.0	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T				
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
31	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MEAN	0.0	0.0005	0.0	0.0	0.0001	0.0067	0.0	0.0011	0.0117	0.0362	0.0	0.0052				
INCHES	0.0	0.013	0.0	0.0	0.002	0.175	0.0	0.029	0.307	0.902	0.0	0.141				
STA AV	0.0	0.018	0.031	0.226	0.172	0.097	0.042	0.011	0.103	0.169	0.007	0.023				

NOTES: To convert discharge in CFS to LB/DAY, multiply by 0.674416. STA AV based on 6 yr (1966-71) record period.

AREA: 19.19 acres

NOTES: Watershed conditions: Formerly cultivated from about 1907 until about 1935 when the land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970 based on 25 uniformly spaced clipped samples, averaged 1,330 pounds of standing grass, 160 pounds of weeds, and 900 pounds per acre of mulch. Prior to Oct. 1970, this watershed was within the same pasture area as the adjacent watershed to the west. For more information on the watershed, see the report of the National Forest Service. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69-40-1 and 69-40-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gauges, Nos. 153 and 154. Precipitation and runoff records began July 1, 1966. STA AV based on 1966-67 record period. For long-term precipitation records, see National Weather Service records at Chicago, Illinois.

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 193 and 194. STA AV based on 6 yr (1966-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED R-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.251	0.0	0.0	0.0	1.373	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.343	0.0	0.0	0.0	0.150	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.006	0.0	0.0	0.0	0.060
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.057
11	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.436	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.366	0.0	0.0	0.0	0.362
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.008
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.056	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.713	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.062	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0
21	0.0	0.143	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.676	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.038	0.0	0.0	0.0	0.0	0.047	0.0	0.0
27	0.0	0.0	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.001	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.021
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.106	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0051	0.0	0.0	0.0074	0.0358	0.0	0.0124	0.0482	0.0528	0.0	0.0164
INCHES	0.0	0.177	0.0	0.0	0.284	1.331	0.0	0.477	1.794	2.031	0.0	0.630
STA AV	0.061	0.101	0.162	0.527	0.645	0.638	0.349	0.194	0.838	0.486	0.123	0.105

NOTES: To convert mean daily discharge in CFS to IN/DAT, multiply by 1.240315. STA AV based on 6 yr (1966-71) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-8

LOCATION: Grady County, Oklahoma; NW 1/4 sec. 13, T. 7 N., R. 6 W., about 8-1/2 miles east and 2-1/2 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.55 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-8												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	0.50	1.65	0.15	0.58	4.03	4.80	1.90	3.69	6.19	5.20	0.56	2.90	32.15											
	Q	0.0	0.056	0.0	0.0	0.129	0.746	0.0	0.197	1.222	1.567	0.0	0.384	4.302											
STA AV	P	0.84	1.26	1.74	2.48	4.29	2.88	2.63	2.76	4.61	2.44	1.21	1.24	28.38											
	Q	0.016	0.088	0.070	0.308	0.452	0.391	0.222	0.086	0.549	0.339	0.047	0.065	2.593											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge				Maximum Volume for Selected Time Interval																			
		Date	Date	1 Hour	2 Hours	Date	Date	6 Hours	12 Hours	1 Day	2 Days	8 Days			Date	Date	1 Hour	2 Hours	Date	Date	1 Hour	2 Hours	8 Days		
1971		10-2	1-308	10-2	0.468	10-2	0.876	10-2	1.380	10-2	1.499	10-2	1.500	10-1	1.500	9-25	1.500								
MAXIMUMS FOR PERIOD OF RECORD																									
		5-6	1.828	5-6	0.724	10-2	0.876	10-2	1.380	10-2	1.499	10-2	1.500	10-1	1.500	9-25	1.500								
		1969		1969		1971		1971		1971		1971		1971		1971									

NOTES: Watershed conditions: Formerly cultivated from about 1907, when land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, average 1,400 pounds of standing grass, 100 pounds of weeds, and 1,200 pounds per acre of silt. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.45-1 and 69.45-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. Precipitation and runoff records began July 1, 1966. STA AV based on 6 yr (1966-71) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1971 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-8												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.03	1	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.26	0.0	0.51	
2	0.10	0.0	0.03	0.0	0.0	0.01	0.80	0.0	0.0	0.13	0.0	0.15	2	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	
3	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.01	0.0	0.0	0.0	6	0.0	0.01	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.02	0.35	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.82	0.16	0.0	0.0	0.0	0.0	0.13	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.19	9	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.19	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.10	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.10	0.0	0.0	0.0	0.46	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	1.67	0.0	0.10	0.0	17	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.16	0.0	0.0	0.10	0.0	0.0	0.0	2.29	0.41	0.0	0.0	18	0.0	0.16	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.09	0.63	0.0	0.0	0.0	19	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.08	0.0	0.47	0.0	0.0	0.0	0.13	0.0	0.0	20	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.13	0.0	0.0	
21	0.0	1.42	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	1.42	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.04	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.35	22	0.0	0.0	0.0	0.04	0.0	0.0	0.12	0.0	0.0	0.0	0.35	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.26	0.0	0.03	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.03	0.0	
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	1.81	0.0	0.0	0.0	0.0	24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	25	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.02	0.92	0.0	0.0	0.0	0.0	0.59	0.0	26	0.0	0.0	0.0	0.0	0.02	0.92	0.0	0.0	0.0	0.59	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.01	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	28	0.0	0.01	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.18	0.0	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.36	29	0.0	0.0	0.18	0.0	0.0	0.0	0.02	0.0	0.02	0.0	0.36	
30	0.0	0.0	0.0	0.0	0.28	0.02	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.28	0.02	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.50	1.65	0.15	0.58	4.03	4.80	1.90	3.69	6.19	5.20	0.56	2.90	TOTAL	0.50	1.65	0.15	0.58	4.03	4.80	1.90	3.69	6.19	5.20	0.56	2.90
STA AV	0.84	1.26	1.74	2.48	4.29	2.88	2.63	2.76	4.61	2.44	1.21	1.24	STA AV	0.84	1.26	1.74	2.48	4.29	2.88	2.63	2.76	4.61	2.44	1.21	1.24

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. STA AV based on 6 yr (1966-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) CHICKASAW, OKLAHOMA WATERSHED R-8												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.214	0.0	0.0	0.0	1.562	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.370	0.0	0.0	0.0	0.174	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.022	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.020	0.0	0.0	0.0	0.036
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.036
11	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.246	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.199	0.0	0.0	0.0	0.339
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.008
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.042	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.691	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.046	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.003	0.0	0.0
21	0.0	0.065	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.682	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.021	0.0	0.0	0.0	0.0	0.028	0.0	0.0
27	0.0	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0023	0.0	0.0	0.0048	0.0288	0.0	0.0074	0.0472	0.0585	0.0	0.0163
INCHES	0.0	0.056	0.0	0.0	0.129	0.746	0.0	0.197	1.222	1.567	0.0	0.384
STA AV	0.016	0.048	0.070	0.308	0.452	0.391	0.222	0.086	0.549	0.339	0.047	0.065

NOTES: To convert discharge in CFS to IBS/DAY, multiply by 0.863944. STA AV based on 6 yr (1966-71) record period.

## SONORA, TEXAS WATERSHED W-14

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowery Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 30720.00 acres 48.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-14														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P	0.0	1.62	0.0	2.67	0.88	1.92	4.05	8.07	2.06	4.25	0.49	0.79	26.82													
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.020													
STA AV	P	0.68	1.33	0.86	2.65	2.86	1.67	1.69	2.15	3.75	2.07	1.35	0.76	21.83													
	Q	0.0	0.0	0.0	0.0	0.012	0.0	0.002	0.0	0.088	0.007	0.0	0.0	0.105													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											

NOTES: Watershed conditions: 0.4% caliche and paved roads; 0.3% urban area; 0.3% cropland; 99.0% rangeland. Cropland seeded to oats in fall for winter grazing. Rangeland moderately to severely overgrazed during the year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70-1, 7. Precipitation data by Thiessen method using rain gages 1, 1-A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 15, 18 miles south of Sonora, Texas.

1971 DAILY AIR TEMPERATURE (degrees F)													SONORA, TEXAS WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min		max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	69 41	56 31	74 48	78 56	79 54	95 69	88 70	82 62	88 64	79 67	77 60	44 39	2	66 48	55 38	73 37	67 37	84 55	94 72	89 64	67 63	87 68	79 68	80 54	42 39
3	68 52	64 44	51 22	70 38	87 57	93 71	91 68	77 62	85 69	79 65	79 46	44 38	4	52 23	62 45	62 32	69 51	87 63	90 67	95 69	78 59	90 70	77 60	67 42	46 33
5	34 11	67 27	77 43	65 36	83 64	90 69	96 68	77 61	91 70	72 61	72 50	44 38	6	35 11	66 31	77 39	63 32	90 65	92 69	95 67	76 59	94 65	77 56	70 47	60 32
7	35 21	51 22	58 27	70 33	89 60	95 69	95 68	75 60	90 67	76 55	49 40	67 39	8	49 18	54 12	65 37	77 49	83 65	93 69	93 70	80 62	94 66	73 59	60 46	70 48
9	61 26	54 25	76 51	78 54	83 69	93 69	94 69	84 63	90 64	78 60	68 51	67 36	10	70 30	61 22	70 83	77 55	86 67	91 70	95 67	88 70	87 63	78 48	69 36	62 34
11	75 38	77 45	78 55	83 54	89 61	91 72	95 72	83 65	85 65	78 52	69 40	66 35	12	74 50	76 42	81 51	82 58	71 53	87 64	91 70	75 68	87 63	78 57	68 43	63 43
13	76 58	67 33	85 45	79 57	71 40	87 66	93 69	76 67	90 57	73 56	73 50	65 35	14	78 44	75 43	83 57	74 55	81 45	87 66	93 67	76 66	89 62	77 54	73 52	73 53
15	77 34	76 33	75 35	75 57	87 55	90 67	92 68	82 65	85 69	81 62	74 60	65 35	16	70 32	81 49	77 45	72 53	89 62	86 64	94 68	85 65	91 61	80 63	75 65	64 45
17	76 36	81 52	77 49	73 54	93 62	87 66	94 72	86 66	91 67	79 67	72 60	56 41	18	76 42	76 62	75 59	85 55	93 63	89 68	92 71	85 64	86 53	76 61	68 45	55 39
19	59 28	75 50	65 33	81 61	90 56	89 67	94 69	85 63	83 69	77 59	60 34	65 39	20	62 32	80 43	67 33	72 46	81 61	86 65	94 69	85 67	74 45	67 46	72 36	71 39
21	77 47	78 35	83 47	81 45	85 67	88 67	94 68	86 68	75 49	74 45	72 59	69 38	22	80 46	52 27	87 45	87 60	88 68	87 67	95 72	87 67	75 65	76 49	65 48	69 33
23	80 38	65 29	81 39	82 50	93 70	85 65	93 71	89 68	78 66	76 55	58 39	67 38	24	72 47	65 39	81 50	82 49	94 60	87 63	91 68	89 69	77 65	72 45	58 35	71 42
25	75 43	67 51	79 57	84 55	85 54	89 68	79 67	90 68	80 67	75 54	56 40	71 47	26	75 36	66 44	84 42	93 63	85 67	87 60	79 70	89 67	84 68	75 63	65 39	70 50
27	74 36	66 39	83 56	91 66	85 70	79 67	79 68	89 69	83 70	73 45	64 35	75 57	28	70 45	70 52	83 57	91 61	87 64	80 69	82 69	87 68	75 57	63 47	74 50	
29	75 53		90 53	91 59	87 70	81 66	88 69	88 70	80 65	75 65	74 39	70 59	30	79 40		74 44	73 56	88 67	87 70	87 67	87 65	79 65	68 40	67 45	
31	79 42		79 54		88 70		81 61	86 64		77 65		61 46	31	79 42		79 54		88 70		81 61	86 64		77 65		61 46
AV.	68 37	67 38	76 45	82 49	86 61	89 67	91 69	83 65	84 63	76 58	68 46	63 41	STAN	52.4	52.7	60.5	65.0	73.7	78.0	79.7	74.0	73.9	66.9	57.0	52.2
STA AV	60 33	61 35	70 42	79 53	81 59	89 65	93 67	92 67	85 62	78 53	69 43	61 36													

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 1630 of the day shown. STA AV based on 8 yr record period.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-14											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.68	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	1.28	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.02E											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.00E	0.0	0.14E											
6	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.61E	0.0	0.0	0.15E	0.0	0.47	0.15E											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25E											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.00E	0.01	0.0	0.92	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.23E	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.63E	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53E	0.0	0.01E	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	1.70	0.0	0.00E	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.15E	0.0	0.0											
19	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.36E	0.99	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.29E	0.0	0.0	0.0	0.33E	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.35E	0.0	0.0	0.16E	0.0	0.35E	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.29E	0.0	0.08	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.00E	0.0	0.09E	0.0	0.24E	0.0	0.0	0.0											
25	0.0	1.34	0.0	0.0	0.0	0.0	0.71	0.0	0.00E	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.71E	0.02E	0.0	0.69	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.05E	0.0	1.49	0.0	0.0	0.00E	0.0	0.0											
28	0.0	0.0	0.0	0.03	0.0	0.03E	0.75E	0.09E	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.03E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0											
TOTAL		1.62	0.0	2.67	0.88	1.92	4.05	8.07	2.06	4.25	0.49	0.79											
STA AV	0.68	1.33	0.86	2.65	2.86	1.67	1.69	2.15	3.75	2.07	1.35	0.76											

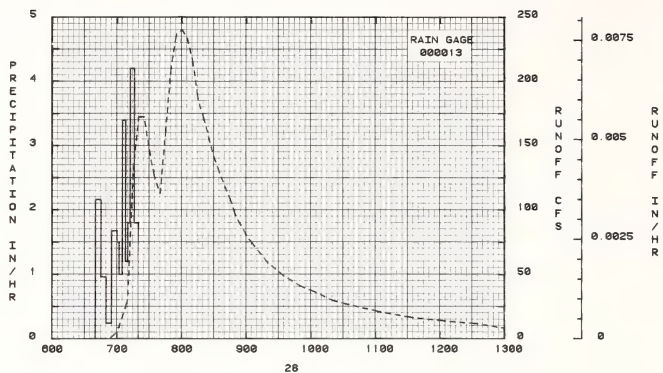
NOTES: Precipitation values are Thiessen weighted average of rain gages 1, 1-1, 2, 3, 4, 5, 6, 1, 8, 9, 10, 11, 12, and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												SONORA, TEXAS WATERSHED W-14											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	5.097	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	2.780	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	18.098	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.254	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.8461	0.0	0.0	0.0	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0											
STA AV	0.0	0.0	0.0	0.0	0.012	0.0	0.002	0.0	0.084	0.007	0.0	0.0											

NOTES: To convert mean daily discharge in CFS to IZ/DAY, multiply by 0.000775. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr period.

1971 SELECTED RUNOFF EVENT						SOBORA, TEXAS WATERSHED #14					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 28, 1971											
7-28	RG 000013	0.0	7-28	RG 000013			645	0.0	0.0		
	0.0	0.0		640	0.0	0.0	650	0.290	0.0		
				645	2.1600	0.18	655	1.330	0.0		
				650	0.9600	0.26	700	5.170	0.0		
				655	0.2400	0.28	705	16.360	0.0		
				700	1.6800	0.42					
WATERSHED CONDITIONS:					702	1.5000	0.47	710	30.410	0.0001	
0.4% caliche and paved roads;					705	1.0000	0.52	715	131.870	0.0003	
0.3% urban area; 0.3% crop-					708	3.4000	0.69	720	172.390	0.0007	
land; 99.0% rangeland. Crop-					710	1.2000	0.73	725	172.350	0.0012	
land seeded to oats in fall					712	1.8000	0.79	730	145.950	0.0016	
for winter grazing. Range-											
land moderately to severely					716	4.2000	1.07	735	124.110	0.0020	
overgrazed during the year					720	1.8000	1.19	740	112.830	0.0023	
depending on climatic								745	160.940	0.0027	
conditions and stocking								750	211.940	0.0032	
rates.								755	236.880	0.0038	
							800	240.050	0.0045		
							805	232.880	0.0051		
							810	215.440	0.0057		
							815	185.810	0.0063		
							820	171.460	0.0068		
							825	156.060	0.0072		
							830	140.740	0.0076		
							835	128.920	0.0080		
							840	118.110	0.0083		
							845	108.400	0.0086		
							850	95.430	0.0089		
							855	87.850	0.0091		
							900	80.070	0.0093		
							905	74.270	0.0095		
							920	58.770	0.0100		
							935	48.690	0.0104		
							950	40.950	0.0108		
							1005	35.860	0.0111		
							1020	29.750	0.0114		
							1035	26.440	0.0116		
							1105	20.660	0.0120		
							1135	16.310	0.0123		
							1205	13.750	0.0125		
							1235	11.530	0.0127		
							1305	8.260	0.0129		
							1405	6.030	0.0131		
							1505	4.690	0.0133		
							1605	3.880	0.0134		
							1705	3.090	0.0135		

NOTES: To convert runoff in cfs to in/hr, multiply by 0.000032.



EVENT OF JULY 28, 1971  
SONORA, TEXAS WATERSHED W-14

## SONORA, TEXAS WATERSHED S-9

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 1774.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-9														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P	0.0	1.46	0.0	3.28	0.40	1.69	4.66	8.25	2.87	4.93	0.47	0.80	28.84													
	Q	0.0	0.0	0.0	0.008	0.0	0.0	0.006	0.183	0.003	0.024	0.0	0.0	0.225													
STA AV	P	0.68	1.32	0.90	2.48	2.76	1.83	1.68	2.04	4.03	2.07	1.19	0.79	21.76													
	Q	0.0	0.0	0.001	0.002	0.007	0.016	0.001	0.018	0.004	0.004	0.0	0.004	0.323													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
MAXIMUM DISCHARGE														MAXIMUM VOLUME for Selected Time Interval													
Date		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
Date		Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.		Date Vol.													
1971	8-15	0.055	8-15	0.028	8-15	0.052	8-15	0.096	8-15	0.113	8-14	0.128	8-14	0.131	8-14	0.131											
MAXIMUMS FOR PERIOD OF RECORD																											
9-23	1.190	9-23	0.570	9-23	0.800	9-23	1.040	9-23	1.070	9-23	1.270	9-22	1.450	9-19	2.680												
1964		1964		1964		1964		1964		1964		1964		1964													

NOTES: Watershed conditions: 0.3% cultive roads; 99.7% rangeland. Rangeland fair condition to moderately overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.2-5. Precipitation data by Thiessen method using rain gages 1 and 1-A. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

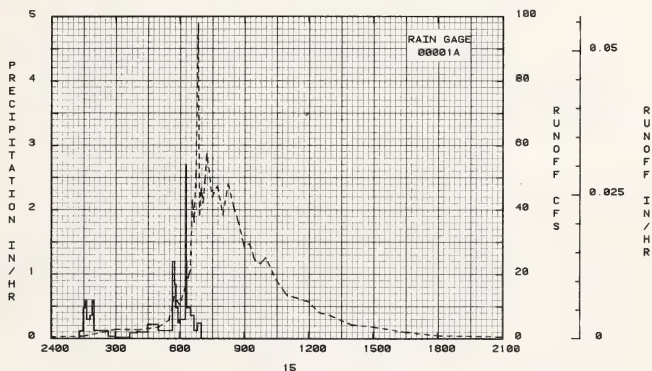
1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-9												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.28	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.67	0.0	0.0	0.0	0.38													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.40	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.03E													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27E	0.0	0.0	0.0	0.15E													
6	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.20E	0.0	0.0	0.23E	0.0	0.51	0.15E													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23E													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.94	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.20E	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.76	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	2.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.02E	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.20E	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.40	1.48	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.26E	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.0	0.37E	0.0	0.0	0.28E	0.0	0.32													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	1.82	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0													
25	0.0	1.20	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.0	0.0	0.67	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.10E	0.0	2.06	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.04	0.0	0.07E	0.44	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.0	1.46	0.0	3.28	0.40	1.69	4.66	8.25	2.87	4.93	0.47	0.80													
STA AV	0.68	1.32	0.90	2.48	2.76	1.83	1.68	2.04	4.03	2.07	1.19	0.79													

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14 (70.001). Precipitation values are Thiessen weighted average of rain gages 1 and 1-A. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr record period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT			SONORA, TEXAS WATERSHED S-9						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs) Acc. (inches)
EVENT OF AUGUST 14 - 15, 1971 (CONTINUED)									
8-15							1030	18.067	0.0970
							1100	13.416	0.1008
							1130	12.521	0.1083
							1200	11.448	0.1075
							1230	8.050	0.1098
							1300	7.155	0.1118
							1400	4.293	0.1182
							1500	3.578	0.1162
							1610	1.968	0.1179
							1800	0.894	0.1186
							2400	0.537	0.1204

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000559.



EVENT OF AUGUST 14 - 15, 1971  
SONORA, TEXAS WATERSHED S-9

## SONORA, TEXAS WATERSHED S-10

LOCATION: Seton County, Texas; gaging station on flood detention reservoir, 6 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 5392.00 acres 8.42 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												SONORA, TEXAS WATERSHED S-10											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
P	0.0	1.57	0.0	2.81	0.93	2.36	3.86	8.00	2.47	3.66	0.47	0.76	26.88										
Q	0.0	0.000	0.0	0.000	0.000	0.0	0.035	0.532	0.0	0.0	0.0	0.0	0.568										
STA AV	0.68	1.32	0.86	2.53	2.79	1.88	1.49	2.07	3.80	1.88	1.31	0.76	21.38										
Q	0.0	0.000	0.0	0.000	0.025	0.012	0.003	0.053	0.192	0.011	0.0	0.005	0.302										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge				Maximum Volume for Selected Time Interval																			
Date	Date	1 Hour	2 Hours	Date	Date	6 Hours	12 Hours	Date	Date	1 Day	2 Days	Date	Date	8 Days		Date	Date	1 Day	2 Days	Date	Date	8 Days	
1971	8-15	0.174	8-15	0.133	8-15	0.228	8-15	0.347	8-14	0.360	8-14	0.404	8-13	0.414	8-7	0.426							
	9-23	0.810	9-23	0.720	9-23	0.950	9-23	1.110	9-23	1.150	9-23	1.230	9-23	1.520	9-19	1.930							
	1964		1964		1964		1964		1964		1964		1964		1964								

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70-3-6. Thiessen weighted rainfall using rain gages 1, 1-A, 2, 4, 5, 6, and 7. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED S-10											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.28	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.62	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.13E											
6	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.65E	0.0	0.0	0.21E	0.0	0.45	0.13E	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.86	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.16E	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.76	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	1.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.06E	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.15E	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.31	0.76	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.26E	0.0	0.0	0.0	0.49E	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.55E	0.0	0.0	0.30E	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	1.56	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0	0.0	0.0	0.0											
25	0.0	1.31	0.0	0.0	0.0	0.0	0.65	0.0	0.00E	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.33E	0.01E	0.0	0.60	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.07E	0.0	1.73	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.04	0.0	0.05E	0.81E	0.01E	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.0	1.57	0.0	2.81	0.93	2.36	3.86	8.00	2.47	3.66	0.47	0.76											
STA AV	0.68	1.32	0.86	2.53	2.79	1.88	1.49	2.07	3.80	1.88	1.31	0.76											

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001-1. Precipitation values are Thiessen weighted average of rain gages 1, 1-A, 2, 4, 5, 6, and 7. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr record period. Estimate codes may indicate that non-significant event totals are included.

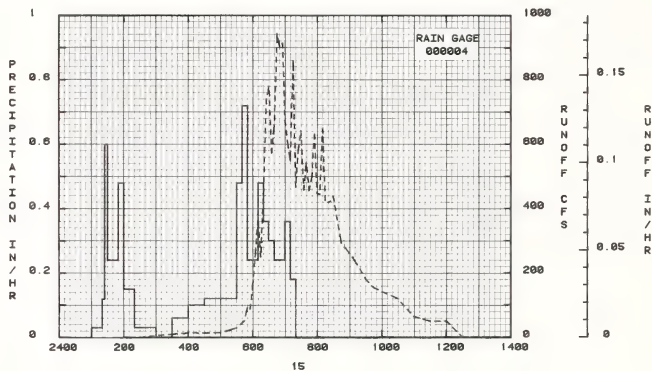
1971 MEAN DAILY DISCHARGE (cfs)													SONORA, TEXAS WATERSHED 5-10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.890	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.830	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.106	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.192	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.478	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.895	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0016	0.0	0.0030	0.0021	0.0	0.2547	3.8869	0.0	0.0	0.0	0.0	MEAN	0.0	0.0016	0.0	0.0030	0.0021	0.0	0.2547	3.8869	0.0	0.0	0.0	0.0
INCHES	0.0	0.0000	0.0	0.0000	0.0000	0.0	0.035	0.532	0.0	0.0	0.0	0.0	INCHES	0.0	0.0000	0.0	0.0000	0.0000	0.0	0.035	0.532	0.0	0.0	0.0	0.0
STA AV	0.0	0.0000	0.0	0.0000	0.0025	0.012	0.003	0.053	0.192	0.011	0.0	0.005	STA AV	0.0	0.0000	0.0	0.0000	0.0025	0.012	0.003	0.053	0.192	0.011	0.0	0.005

NOTES: To convert mean daily discharge in CFS to IN/DAV, multiply by 0.004414. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr period.

1971 SELECTED RUNOFF EVENT												SONORA, TEXAS WATERSHED 5-10											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.			Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)			Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 15, 1971																							
RG 000004						RG 000004																	
8-15	0.97	0.045	8-15	100	0.0	0.0	8-15	230	0.0	0.0		8-15	230	0.0	0.0			8-15	230	0.0	0.0		
				120	0.0300	0.01		330	5.786	0.0018			330	5.786	0.0018				330	5.786	0.0018		
				125	0.1199	0.02		400	14.136	0.0031			400	14.136	0.0031				400	14.136	0.0031		
				130	0.6900	0.07		430	13.592	0.0043			430	13.592	0.0043				430	13.592	0.0043		
				140	0.2400	0.11		500	14.136	0.0056			500	14.136	0.0056				500	14.136	0.0056		
WATERSHED CONDITIONS:																							
Caliche roads - 0.4%; range-																							
land - 99.6%. Range																							
condition poor to fair, with																							
moderate to severe over-																							
grazing during a year de-																							
pending on climatic																							
conditions and stocking																							
rates.																							
				150	0.2401	0.15		515	21.204	0.0066			515	21.204	0.0066				515	21.204	0.0066		
				200	0.4800	0.23		530	29.359	0.0079			530	29.359	0.0079				530	29.359	0.0079		
				220	0.1500	0.28		545	51.651	0.0103			545	51.651	0.0103				545	51.651	0.0103		
				300	0.0300	0.30		550	92.428	0.0177			550	92.428	0.0177				550	92.428	0.0177		
				330	0.0	0.30		555	87.535	0.0130			555	87.535	0.0130				555	87.535	0.0130		
				400	0.0600	0.33		600	160.390	0.0155			600	160.390	0.0155				600	160.390	0.0155		
				430	0.1000	0.38		605	269.428	0.0194			605	269.428	0.0194				605	269.428	0.0194		
				500	0.1200	0.44		610	370.799	0.0250			610	370.799	0.0250				610	370.799	0.0250		
				530	0.1200	0.50		615	250.099	0.0290			615	250.099	0.0290				615	250.099	0.0290		
				540	0.4800	0.58		620	455.070	0.0359			620	455.070	0.0359				620	455.070	0.0359		
				550	0.7200	0.70		625	741.053	0.0471			625	741.053	0.0471				625	741.053	0.0471		
				600	0.2401	0.74		630	780.198	0.0594			630	780.198	0.0594				630	780.198	0.0594		
				610	0.4800	0.78		635	572.509	0.0680			635	572.509	0.0680				635	572.509	0.0680		
				620	0.4800	0.86		640	660.586	0.0780			640	660.586	0.0780				640	660.586	0.0780		
				630	0.3600	0.92		645	943.852	0.0929			645	943.852	0.0929				645	943.852	0.0929		
				640	0.3000	0.97		650	899.812	0.1065			650	899.812	0.1065				650	899.812	0.1065		
				650	0.2401	1.01		655	915.035	0.1203			655	915.035	0.1203				655	915.035	0.1203		
				700	0.2400	1.05		700	673.052	0.1309			700	673.052	0.1309				700	673.052	0.1309		
				710	0.3600	1.11		705	602.412	0.1400			705	602.412	0.1400				705	602.412	0.1400		
				720	0.1800	1.14		710	546.585	0.1483			710	546.585	0.1483				710	546.585	0.1483		
								715	858.490	0.1619			715	858.490	0.1619				715	858.490	0.1619		
								720	465.944	0.1689			720	465.944	0.1689				720	465.944	0.1689		
								725	582.838	0.1777			725	582.838	0.1777				725	582.838	0.1777		
								730	642.644	0.1879			730	642.644	0.1879				730	642.644	0.1879		
								735	547.246	0.1948			735	547.246	0.1948				735	547.246	0.1948		

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED S-10					
PRECEDENT CONDITIONS						RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 15, 1971 (CONTINUED)											
							8-15	740	543.148	0.2030	
								745	455.070	0.2102	
								750	496.936	0.2177	
								755	631.227	0.2272	
								800	445.827	0.2342	
								805	446.196	0.2809	
								810	645.712	0.2507	
								815	424.625	0.2574	
								820	418.643	0.2637	
								825	422.992	0.2701	
								830	436.217	0.2770	
								845	291.962	0.2904	
								900	260.972	0.3024	
								915	224.545	0.3127	
								930	181.050	0.3210	
								945	153.322	0.3281	
								1030	119.069	0.3445	
								1100	63.068	0.3503	
								1130	49.476	0.3548	
								1200	50.563	0.3594	

NOTES: To convert runoff in cfs to in/hr, multiply by 0.000184.



EVENT OF AUGUST 15, 1971  
SONORA, TEXAS WATERSHED S-10

## SONORA, TEXAS WATERSHED S-11

LOCATION: Sutton County, Texas: gaging station on flood detention reservoir, 4 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10787.00 acres 16.85 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED S-11													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	0.0	1.61	0.0	2.77	1.16	2.70	3.96	7.82	1.82	3.31	0.84	0.57	26.16														
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.039	0.563	0.0	0.0	0.0	0.0	0.602														
STA IV P	0.70	1.31	0.83	2.70	3.05	1.83	1.77	2.06	3.71	1.80	1.31	0.75	21.82														
Q	0.0	0.0	0.0	0.020	0.097	0.009	0.004	0.051	0.135	0.045	0.001	0.008	0.369														
ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
Date Rate														Date Vol.													
1 Hour														2 Hours													
Date Vol.														Date Vol.													
6 Hours														12 Hours													
Date Vol.														Date Vol.													
1 Day														2 Days													
Date Vol.														Date Vol.													
8 Days														8 Days													
Date Vol.														Date Vol.													
1971	8-15	0.346		8-15	0.197		8-15	0.308		8-15	0.457		8-15	0.481		8-14	0.484		8-13	0.484		8-7	0.484				
MAXIMUMS FOR PERIOD OF RECORD																											
9-23	0.390		9-23	0.310		9-23	0.550		9-23	0.770		9-23	0.780		9-23	0.780		9-23	0.910		9-19	1.250					
1964			1964			1964			1964			1964			1964			1964			1964						

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair; moderately to severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.4-8. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-term precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-11												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.73	0.0	0.0	0.0	0.41													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.12E													
6	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.12E	0.0	0.44	0.14E	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.94	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.21E	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.52	0.0	0.75	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	1.72	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.05E	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.15E	0.0													
19	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.30	0.70	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.28	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.26	0.0	0.30	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.98	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0													
25	0.0	1.33	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.57	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.14E	0.0	1.36	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.05	0.0	1.29	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.0	1.61	0.0	2.77	1.16	2.70	3.96	7.82	1.82	3.31	0.44	0.57													
STA IV	0.70	1.31	0.83	2.70	3.05	1.83	1.77	2.06	3.71	1.80	1.31	0.75													

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001-1. Precipitation values are thickness weighted average of rain gages 5, 6, 7, 8, 9, 10, and 11. Records began May 1961; part-year amounts not included in averages. STA IV based on 10 yr record period. Estimate codes may indicate that non-significant event totals are included.

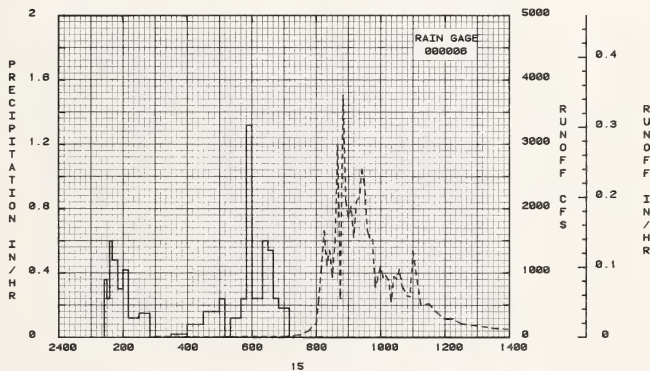
1971 MEAN DAILY DISCHARGE (cfs)													SONORA, TEXAS WATERSHED S-11												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.86	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	219.34	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.31	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	16.31	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5662	8.2324	0.0	0.0	0.0	MEAN	0.0	0.0	0.0	0.0	0.0	0.5662	8.2324	0.0	0.0	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.039	0.563	0.0	0.0	0.0	INCHES	0.0	0.0	0.0	0.0	0.0	0.039	0.563	0.0	0.0	0.0	0.0	
STA AV	0.0	0.0	0.0	0.0	0.020	0.097	0.009	0.004	0.051	0.135	0.045	0.001	STA AV	0.0	0.0	0.0	0.0	0.020	0.097	0.009	0.004	0.051	0.045	0.001	0.008

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002207. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr record period.

1971 SELECTED RUNOFF EVENT										SONORA, TEXAS WATERSHED S-11									
ANTECEDENT CONDITIONS					RAINFALL					RUNOFF									
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.					
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)					
EVENT OF AUGUST 14 - 15, 1971																			
RG 000006					RG 000006														
8-15	0.45	0.001	8-15	125	0.0	0.0	8-15	300	10.877	0.000									
				135	0.3600	0.03		430	6.526	0.0009									
				135	0.2399	0.05		600	9.789	0.0022									
				140	0.6000	0.10		700	9.789	0.0031									
				150	0.4800	0.18		730	36.981	0.0048									
WATERSHED CONDITIONS:																			
Caliche roads - 0.4%;										745 97.892 0.0070									
rangeland - 99.6%. Range										800 218.626 0.0120									
condition poor to fair;										805 626.509 0.0167									
moderately to severely										810 1108.358 0.0251									
overgrazed during a year										815 1658.726 0.0382									
depending on climatic																			
conditions and stocking										820 1118.183 0.0466									
rates.										825 1359.611 0.0569									
				400	0.6200	0.40		820	1118.183	0.0466									
				430	0.0800	0.44		825	1359.611	0.0569									
				500	0.1600	0.52		830	937.587	0.0643									
				510	0.2401	0.56		835	1478.169	0.0754									
				520	0.0	0.56		840	2991.144	0.0980									
				530	0.1200	0.58		845	599.315	0.1027									
				540	0.1199	0.60		850	3765.580	0.1311									
				550	0.2401	0.64		855	2117.730	0.1471									
				600	1.3200	0.86		900	1855.596	0.1618									
				610	0.2400	0.90		905	2030.715	0.1771									
				620	0.2400	0.94		910	1554.308	0.1888									
				630	0.6000	1.04		915	2122.082	0.2056									
				640	0.5400	1.13		920	2174.290	0.2220									
				650	0.2401	1.17		925	2614.804	0.2417									
				710	0.1800	1.23		930	3261.373	0.2604									
								935	1664.164	0.2730									
								940	1541.256	0.2846									
								945	1523.851	0.2966									
								950	784.224	0.3025									
								955	935.413	0.3096									

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED S-11			
PRECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)
EVENT OF AUGUST 14 - 15, 1971 (CONTINUED)									
8-15							1000	1098.565	0.3183
							1005	920.185	0.3252
							1010	958.253	0.3324
							1015	888.641	0.3394
							1020	546.020	0.3435
							1025	944.113	0.3506
							1030	904.956	0.3577
							1035	1055.057	0.3657
							1040	785.311	0.3716
							1045	715.698	0.3773
							1050	643.912	0.3822
							1055	624.333	0.3869
							1100	1340.032	0.3975
							1115	501.425	0.4090
							1130	519.915	0.4209
							1145	379.603	0.4296
							1200	277.361	0.4360
							1215	284.974	0.4425
							1230	206.661	0.4472
							1300	176.206	0.4553
							1330	138.137	0.4617
							1415	117.470	0.4698
							1430	90.278	0.4719
							1500	63.086	0.4768
							1530	44.595	0.4768
							1600	35.894	0.4785
							1630	30.455	0.4799
							1700	51.121	0.4822
							1730	0.0	0.4822
							1800	0.0	0.4822
							1830	22.841	0.4832

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000092.



EVENT OF AUGUST 14 - 15, 1971  
SONORA, TEXAS WATERSHED S-11

## SONORA, TEXAS WATERSHED S-12

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 2 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 2801.00 acres 4.38 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-12	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1971	0.0	1.58	0.0	2.25	0.85	1.49	8.15	7.88	1.53	8.18	0.53	0.69	25.02	
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.526	0.0	0.0	0.0	0.0	0.526	
1971	0.67	1.29	0.79	2.76	2.97	1.42	1.38	2.09	3.50	2.10	1.30	0.72	21.54	
Q	0.0	0.0	0.0	0.058	0.190	0.001	0.012	0.053	0.162	0.083	0.0	0.026	0.585	
ANNUAL MAXIMUM DISCHARGE (cfs/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		6 Hours		1 Day		2 Days		8 Days	
	Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1971	8-15	0.069	8-15	0.041	8-15	0.053	8-16	0.082	8-15	0.189	8-15	0.216	8-14	0.310
													8-8	0.381
MAXIMUMS FOR PERIOD OF RECORD														
	9-23	1.200	9-23	0.790	9-23	1.000	9-23	1.080	9-23	1.090	9-23	1.090	9-23	1.150
	1964		1964		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Paved roads - 0.2% of the area; rangeland - 99.8%. Range conditions poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.5-7. Thimessen weighted rainfall using rain gages 9, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, approximately 18 miles south of Sonora, Texas.

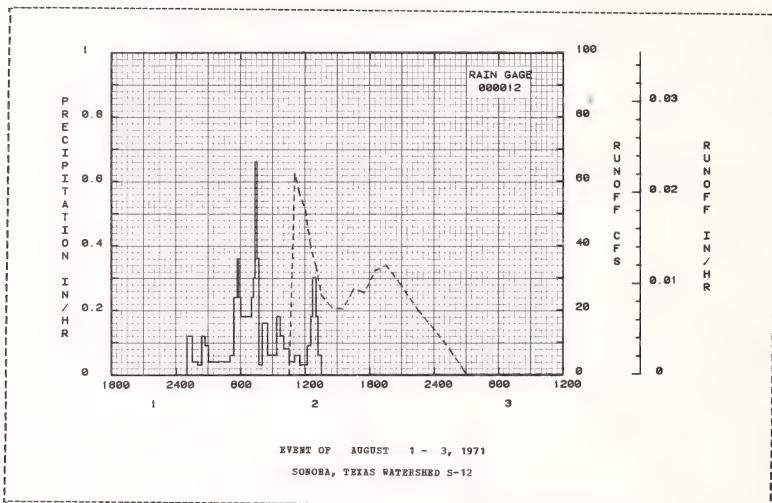
1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-12	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.61	0.0	0.0	0.0	0.0		0.31E
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.0		0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0		0.05E
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.00E	0.0	0.02E	0.0	0.0		0.10E
6	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
7	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.05E	0.0	0.38	0.12E	0.0		0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0		0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.23E
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0		0.0
11	0.0	0.0	0.0	0.0	0.17E	0.06	0.0	0.81	0.0	0.0	0.0	0.0		0.0
12	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.26E	0.0	0.0	0.0	0.0		0.0
13	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.28E	0.0	0.0	0.0	0.0		0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36E	0.0	0.08E	0.0	0.0		0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.99	0.0	0.0	0.0	0.0		0.0
16	0.0	0.0	0.0	1.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
17	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0		0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.16E	0.0	0.0	0.0		0.0
19	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.36E	0.83	0.0	0.0	0.0		0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
21	0.0	0.29	0.0	0.0	0.0	0.29E	0.0	0.0	0.0	0.0	0.0	0.0		0.0
22	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.03E	0.0	0.41	0.0		0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.25E	0.0	0.70	0.0	0.0	0.0		0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.30E	0.0	0.28E	0.0	0.0	0.0		0.0
25	0.0	1.29	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.0	0.0		0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.58E	0.0	0.0	0.69	0.0	0.0		0.0
27	0.0	0.0	0.0	0.0	0.01E	0.0	1.30	0.0	0.0	0.03E	0.0	0.0		0.0
28	0.0	0.0	0.0	0.0	0.06E	0.0	0.95	0.02E	0.0	0.0	0.0	0.0		0.0
29	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0		0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	1.58	0.0	2.25	0.85	1.49	4.15	7.88	1.51	4.18	0.53	0.69		
STA AV	0.67	1.29	0.79	2.76	2.97	1.42	1.38	2.09	3.50	2.10	1.30	0.72		

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001-1. Precipitation values are Thimessen weighted average of rain gages 8, 10, 11, 12, and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr record period. Estimate codes may indicate that non-significant event totals are included.



1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED S-12					
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 1 - 3, 1971 (CONTINUED)											
8- 2											
				1200	0.1800	1.29					
				1250	0.3000	1.38					
				1300	0.3000	1.39					
				1310	0.1800	1.42					
				1330	0.0600	1.44					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000354.



## SONORA, TEXAS WATERSHED S-13

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 0.5 mi. SE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 686.00 acres 1.07 sq. miles

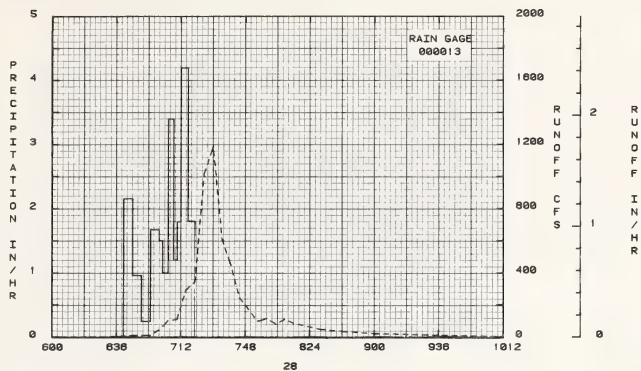
MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED S-13													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P	0.0	1.59	0.0	2.03	0.60	1.75	5.23	7.45	0.92	3.57	0.57	0.60	24.31													
	Q	0.0	0.004	0.0	0.005	0.001	0.001	0.733	0.536	0.0	0.0	0.0	0.0	1.280													
STA AV	P	0.72	1.37	0.80	2.73	2.74	1.44	1.76	1.86	3.18	2.05	1.32	0.72	20.68													
	Q	0.0	0.000	0.001	0.073	0.075	0.000	0.074	0.054	0.096	0.064	0.0	0.007	0.445													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge														Maximum Volume for Selected Time Interval													
		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		6 Days													
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1971		7-28	1.717	7-28	0.554	7-28	0.626	7-28	0.648	7-27	0.648	7-27	0.657	7-26	0.728	7-25	1.264										
MAXIMUMS FOR PERIOD OF RECORD																											
		7-28	1.717	7-28	0.554	7-28	0.626	9-23	0.680	9-23	0.680	9-23	0.680	7-26	0.728	7-25	1.264										
		1971		1971		1971		1964		1964		1964		1964		1971											

NOTES: Watershed conditions: Paved roads - 1.5% of the area, rangeland - 98.5%. Range in poor to fair condition, severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70-6-7. Precipitation data by Thiessen method using rain gages 12 and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 16, 18 miles south of Sonora, Texas.

DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1971												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	0.25E	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.03E	0.0	0.10E	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.05E	0.0	0.43	0.07E	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23E	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.03E	0.08	0.0	0.68	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.25E	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.00E	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.03E	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.85	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	1.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20E	0.03E	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.28E	0.72	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.32	0.0	0.0	0.0	0.82E	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	3.05E	0.0	0.50	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.31	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.08E	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	1.27	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	1.37	0.0	0.0	0.60	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	1.08	0.0	0.0	0.00E	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.72	1.59	0.0	2.03	0.60	1.75	5.23	7.45	0.92	3.57	0.57	0.60													
STA AV	0.72	1.37	0.80	2.73	2.74	1.44	1.76	1.86	3.18	2.05	1.32	0.72													

NOTES: For daily air temperatures, in the vicinity, see table for W-14 p. 70.001-1. Precipitation values are Thiessen weighted average of rain gages 12 and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 10 yr record period. Estimate codes may indicate that non-significant event totals are included.





EVENT OF JULY 28, 1971  
SONORA, TEXAS WATERSHED S-13

## SONORA, TEXAS WATERSHED W-1

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												SONORA, TEXAS WATERSHED W-1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	0.0	0.83	0.08	2.04	1.05	4.47	4.20	9.29	2.13	5.00	0.09	0.97	30.15										
Q	0.0	0.0	0.0	0.0	0.0	0.0	0.013	2.835	0.0	0.341	0.0	0.0	3.189										
STA AV P	1.03	1.52	0.73	2.64	2.65	2.38	2.36	3.10	3.65	2.40	1.11	0.62	24.20										
Q	0.085	0.004	0.0	0.196	0.120	0.057	0.014	0.384	0.197	0.168	0.001	0.0	1.225										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
Date												Date											
1 Hour												6 Hours											
Date Vol.												12 Hours											
Date Vol.												1 Day											
Date Vol.												2 Days											
Date Vol.												8 Days											
Date Vol.												Date Vol.											
1971	8-12	0.275	8-12	0.247	8-12	0.438	8-12	0.793	8-12	0.903	8-2	1.028	8-1	1.131	8-8	1.694							
MAXIMUMS FOR PERIOD OF RECORD																							
	4-30	1.680	4-30	0.990	4-30	1.180	4-30	1.280	4-30	1.300	4-30	1.300	4-29	1.490	8-8	1.694							
	1966		1966		1966		1966		1966		1966		1966		1971								

NOTES: Watershed conditions: 100% rangeland; root plowed for brush control, August 1970; fair level of management; stocking rate, 30-35 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA RISC, Pub. 1662, p. 70-7-7. Precipitation data from rain gage 15. Precipitation and runoff records began October 1963; part-year amounts not included in station averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station No. 14. Watershed is on subsection property.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.40	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0	0.52											
3	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	1.53	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E											
7	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.14E	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	1.38	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	1.42	0.0	1.68	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.70	0.0	0.28	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	1.13	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	1.81	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.29	0.0	0.0											
19	0.0	0.0	0.0	0.23E	0.10E	0.0	0.0	0.0	0.27	2.00	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.18E	0.0	0.0	0.0	1.40	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.08E	0.0	0.09E	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.24	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.35	0.0	0.05E	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.65	0.0	0.0	0.0	0.0	2.46	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.10E	1.05	0.0	0.0	0.62	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.24	0.64	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.0	0.83	0.08	2.04	1.05	4.47	4.20	9.29	2.13	5.00	0.09	0.97											
STA AV	1.03	1.52	0.73	2.64	2.65	2.38	2.36	3.10	3.65	2.40	1.11	0.62											

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001-1. Precipitation data obtained from rain gage 15. Records began October 1963; part-year amounts not included in averages. STA AV based on 8 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)												SONORA, TEXAS WATERSHED W-1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.438	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.391	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.068	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.240	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.111	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.036	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0002	0.0392	0.0	0.0047	0.0	0.0											
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.013	2.835	0.0	0.381	0.0	0.0											
STA AV	0.085	0.004	0.0	0.196	0.120	0.057	0.018	0.384	0.197	0.168	0.001	0.0											

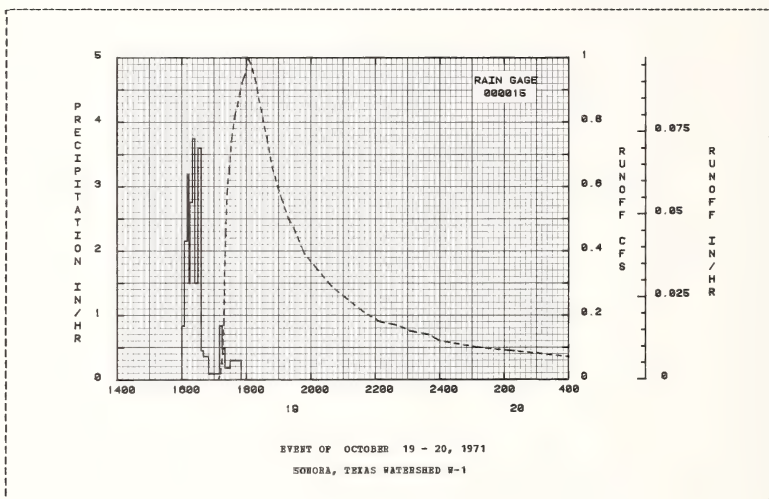
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.233495. Records began October 1963; part-year amounts not included in averages. STA AV based on 8 yr record period.

1971 SELECTED RUNOFF EVENT												SONORA, TEXAS WATERSHED W-1											
PRECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF OCTOBER 19 - 20, 1971																							
RG 000015												RG 000015											
10-19	0.19	0.0	10-19	1600	0.0	0.0	10-19	1708	0.0	0.0													
				1605	0.8400	0.07		1710	0.006	0.0													
				1610	2.1602	0.25		1712	0.023	0.0													
				1613	3.1999	0.41		1714	0.048	0.0001													
				1615	1.4993	0.46		1716	0.084	0.0003													
WATERSHED CONDITIONS:																							
100% rangeland; fair level of management; stocking rate, 30-35 animal units per section.																							
				1620	2.7603	0.69		1718	0.192	0.0007													
				1624	3.7501	0.94		1719	0.280	0.0011													
				1630	1.4998	1.09		1720	0.368	0.0016													
				1636	3.6003	1.45		1722	0.474	0.0029													
				1640	0.4500	1.48		1724	0.579	0.0047													
				1650	0.3600	1.54		1728	0.653	0.0087													
				1710	0.0900	1.57		1733	0.751	0.0143													
				1715	0.8400	1.64		1738	0.818	0.0209													
				1720	0.4799	1.68		1743	0.850	0.0276													
				1730	0.1800	1.71		1748	0.892	0.0345													
				1750	0.3000	1.81		1753	0.930	0.0421													
								1758	0.951	0.0496													
								1803	0.995	0.0574													
								1808	0.982	0.0657													
								1818	0.917	0.0808													
								1828	0.834	0.0951													
								1838	0.747	0.1060													
								1848	0.664	0.1193													
								1858	0.600	0.1296													
								1908	0.545	0.1389													
								1918	0.505	0.1473													
								1928	0.467	0.1552													
								1948	0.393	0.1691													
								2008	0.347	0.1812													
								2038	0.288	0.1966													

NOTES: To convert mean daily discharge in CFS to IN/HR, multiply by 0.097229.

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED W-1				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF OCTOBER 19 - 20, 1971 (CONTINUED)										
							10-19	2108	0.248	0.2096
								2138	0.207	0.2207
								2208	0.184	0.2302
								2238	0.165	0.2387
								2308	0.152	0.2464
								2338	0.140	0.2535
								2400	0.124	0.2582
							10-20	108	0.100	0.2705
								208	0.087	0.2796
								408	0.068	0.2947
								608	0.057	0.3069
								808	0.051	0.3174
								1008	0.038	0.3261
								1208	0.029	0.3326
								1408	0.023	0.3377
								1638	0.011	0.3385
								1638	0.005	0.3401
								1838	0.002	0.3408
								2300	0.0	0.3412

NOTES: To convert mean daily discharge in CFS to IN/HR, multiply by 0.097229.



## SONORA, TEXAS WATERSHED W-2

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 8.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-2													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1971	P	0.0	0.74	0.06	1.85	0.85	4.33	3.87	9.05	1.94	4.78	0.11	0.89	28.47													
	Q	0.0	0.0	0.0	0.0	0.0	0.014	0.0	4.562	0.0	0.0	0.0	0.0	4.575													
STA AV	P	0.66	1.37	0.67	2.55	2.50	2.33	2.12	3.08	2.83	2.36	1.15	0.58	22.21													
	Q	0.0	0.002	0.0	0.309	0.146	0.052	0.0	0.682	0.0	0.183	0.002	0.0	1.374													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge													Maximum Volume for Selected Time Interval														
		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1971		8-12	0.885	8-12	0.524	8-12	0.939	8-12	1.493	8-12	1.592	8-12	1.682	8-11	1.799	8- 8	2.889										
MAXIMUMS FOR PERIOD OF RECORD																											
		4-30	1.550	4-30	1.250	4-30	1.710	4-30	1.960	4-30	2.000	4-30	2.000	4-29	2.140	8- 8	2.889										
		1966		1966		1966		1966		1966		1966		1966		1971											

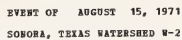
NOTES: Watershed conditions: 100% rangeland; low good level of management; stocking rate, 32 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.8-6. Precipitation data from rain gage 16. Precipitation and runoff records began January 1965. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14. Watershed is on substation property.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.36	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.0	0.48											
3	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	1.48	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E											
7	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.14E	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	1.28	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	1.34	0.0	1.68	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.25	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	1.04	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	1.68	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.16E	0.19E	0.0	0.0											
19	0.0	0.0	0.0	0.17E	0.04E	0.0	0.0	0.0	0.25E	1.96	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.15E	0.0	0.0	0.0	1.31	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.11E	0.0	0.11E	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.28	0.0	0.0 E	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.59	0.0	0.0	0.0	0.0	2.50	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.09E	0.80	0.0	0.0	0.61	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.25E	0.57	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.0	0.74	0.06	1.85	0.85	4.33	3.87	9.05	1.94	4.78	0.11	0.89											
STA AV	0.66	1.37	0.67	2.55	2.50	2.33	2.12	3.08	2.83	2.36	1.15	0.58											

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001-1. Precipitation data obtained from rain gage 16. Records began January 1965. STA AV based on 7 yr record period. Estimate codes may indicate that non-significant event totals are included.



NOTES: To convert runoff in CFS to IN/HR, multiply by 0.115318.



## SONORA, TEXAS WATERSHED W-3

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 6.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-3																											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																												
1971	P 0.0	0.73	0.02	2.53	0.90	5.21	4.42	9.87	2.37	4.67	0.11	0.98	31.81	Q 0.0	0.0	0.0	0.0	0.0	0.011	0.017	2.089	0.0	0.004	0.0	0.0	2.122															
STA AV	P 0.64	1.40	0.70	2.85	2.73	2.48	2.11	3.57	2.76	2.58	1.16	0.61	23.60	Q 0.0	0.0	0.0	0.0	0.0	0.002	0.002	0.298	0.0	0.011	0.0	0.0	0.503															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																									
Maximum Discharge														Maximum Volume for Selected Time Interval																											
Date Rate														1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days			
														Date Vol.				Date Vol.				Date Vol.				Date Vol.				Date Vol.				Date Vol.							
1971	8-12 1.184				8-12 0.531				8-12 0.698				8-12 0.917				8-12 0.929				8-12 1.071				8-11 1.175				8- 8 1.507												
MAXIMUMS FOR PERIOD OF RECORD																																									
4-30 1.670														4-30 1.020				4-30 1.220				4-30 1.260				4-30 1.260				4-30 1.260				4-30 1.260				8- 8 1.507			
1966														1966				1966				1966				1966				1966				1971							

NOTES: Watershed conditions: 100% rangeland; range in fair condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1282, p. 70, 9-4. Precipitation data from rain gage 17. Precipitation and runoff records began January 1965. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.49	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29	0.0	0.0	0.0	0.0													
3	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	1.22	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.50	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.10	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	1.44	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	1.58	0.0	1.87	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.49	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.25E	0.0	0.97	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	2.40	0.0	0.26	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.18E	0.0	0.0													
19	0.0	0.0	0.0	0.13E	0.22E	0.0	0.0	0.0	0.15E	2.08	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.18E	0.0	0.0	0.0	2.23	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.11E	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76	0.0	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.28	0.0	0.07E	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.55	0.0	0.0	0.0	0.0	2.14	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	1.04	0.0	0.0	0.57	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.26	1.09	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.29	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.0	0.73	0.02	2.53	0.90	5.21	4.42	9.87	2.37	4.67	0.11	0.98													
STA AV	0.64	1.40	0.70	2.85	2.73	2.48	2.11	3.57	2.76	2.58	1.16	0.61													

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, 70.001-1. Precipitation data obtained from rain gage 17. Records began January 1965. STA AV based on 7 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)													SONORA, TEXAS WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.164	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.263	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.041	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.091	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
MEAN	0.0	0.0	0.0	0.0	0.0	0.0001	0.0002	0.0190	0.0	0.0	0.0	0.0													
INCHES	0.0	0.0	0.0	0.0	0.0	0.011	0.017	2.089	0.0	0.008	0.0	0.0													
STA AV	0.0	0.0	0.0	0.0	0.181	0.009	0.002	0.002	0.298	0.0	0.011	0.0													

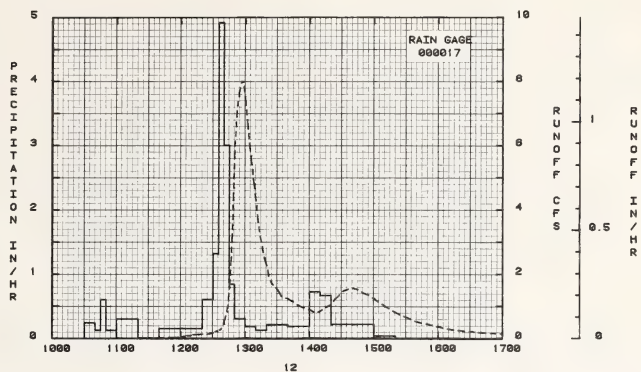
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 3.552486. Records began January 1965. STA AV based on 7 yr record period.

1971 SELECTED RUNOFF EVENT											SONORA, TEXAS WATERSHED W-3													
PRECEDENT CONDITIONS						RAINFALL					RUNOFF													
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.														
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)														
EVENT OF AUGUST 12, 1971																								
RG 000017						RG 000017																		
8-12	0.0	0.004	8-12	1030	0.0	0.0	8-12	1120	0.0	0.0														
				1040	0.2400	0.04		1130	0.062	0.0														
				1045	0.1999	0.05		1140	0.009	0.0001														
				1050	0.6000	0.10		1150	0.022	0.0005														
				1100	0.1200	0.12		1158	0.032	0.0010														
WATERSHED CONDITIONS:						1110	0.3000	0.17	1200	0.042	0.0012													
100% rangeland; range in						1120	0.3000	0.22	1204	0.061	0.0017													
fair condition.						1140	0.0	0.22	1206	0.079	0.0020													
				1200	0.1500	0.27		1210	0.093	0.0028														
				1220	0.1500	0.32		1212	0.108	0.0033														
				1230	0.6000	0.42		1220	0.127	0.0056														
				1235	1.3200	0.53		1226	0.136	0.0075														
				1240	4.5201	0.94		1230	0.161	0.0090														
				1245	3.0000	1.19		1232	0.203	0.0098														
				1250	0.6399	1.26		1234	0.228	0.0109														
				1300	0.3000	1.31		1236	0.259	0.0120														
				1310	0.1800	1.34		1238	0.314	0.0135														
				1320	0.1200	1.36		1240	0.452	0.0153														
				1340	0.2100	1.43		1242	0.690	0.0183														
				1400	0.1800	1.49		1244	1.030	0.0223														
				1410	0.7201	1.61		1245	1.394	0.0258														
				1420	0.6600	1.72		1246	1.830	0.0295														
				1440	0.2100	1.79		1247	2.539	0.0346														
				1500	0.2100	1.86		1248	3.253	0.0413														
				1520	0.0300	1.87		1249	4.527	0.0525														
									1250	5.837	0.0645													
									1252	7.090	0.0944													
									1254	7.661	0.1328													
									1256	7.997	0.1600													
									1258	7.983	0.2106													

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.148020.

1971 SELECTED RUNOFF EVENT							SCHORA, TEXAS WATERSHED W-3				
PRECIPITATION CONDITIONS							RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 12, 1971 (CONTINUED)											
							8-12	1300	7.400	0.2506	
								1302	6.658	0.2831	
								1304	5.982	0.3160	
								1306	5.387	0.3423	
								1308	4.798	0.3688	
								1310	4.282	0.3998	
								1312	3.607	0.4103	
								1314	3.144	0.4259	
								1316	2.814	0.4414	
								1318	2.494	0.4537	
								1320	2.264	0.4661	
								1322	1.932	0.4758	
								1324	1.754	0.4854	
								1326	1.663	0.4933	
								1330	1.519	0.5099	
								1334	1.298	0.5237	
								1340	1.215	0.5419	
								1345	1.121	0.5568	
								1350	0.999	0.5697	
								1355	0.943	0.5815	
								1400	0.879	0.5931	
								1404	0.810	0.6014	
								1408	0.806	0.6093	
								1412	0.883	0.6176	
								1416	0.968	0.6267	
								1420	1.052	0.6366	
								1424	1.215	0.6477	
								1428	1.353	0.6603	
								1432	1.477	0.6742	
								1436	1.529	0.6890	
								1440	1.551	0.7041	
								1445	1.508	0.7236	
								1450	1.404	0.7413	
								1455	1.328	0.7579	
								1500	1.211	0.7740	
								1510	0.986	0.8007	
								1520	0.786	0.8227	
								1530	0.642	0.8405	
								1540	0.496	0.8543	
								1550	0.417	0.8656	
								1600	0.345	0.8751	
								1610	0.273	0.8826	
								1620	0.232	0.8869	
								1640	0.171	0.8988	
								1700	0.132	0.9063	
								1720	0.090	0.9118	
								1740	0.063	0.9156	
								1800	0.049	0.9184	
								1830	0.038	0.9216	
								1900	0.025	0.9239	
								2000	0.011	0.9266	
								2100	0.004	0.9277	
								2200	0.003	0.9282	
								2400	0.003	0.9291	

NOTES: To convert runoff in CFS to in/hr, multiply by 0.148020.



EVENT OF AUGUST 12, 1971  
SONORA, TEXAS WATERSHED W-3

## SONORA, TEXAS WATERSHED W-4

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 4.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-4														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1971	P	0.0	0.61	0.04	2.05	1.02	5.23	3.69	9.62	2.38	4.84	0.08	0.97	30.53														
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.325	0.0	0.0	0.0	0.0	0.325														
STA AV	P	0.66	1.25	0.82	3.31	2.01	2.62	2.50	4.08	3.18	2.84	1.26	0.55	25.07														
	Q	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.054	0.0	0.012	0.0	0.0	0.106														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
Maximum Discharge														Maximum Volume for Selected Time Interval														
Date	Date	1 Hour	Date	Date	2 Hours	Date	Date	6 Hours	Date	Date	12 Hours	Date	Date	1 Day	Date	Date	2 Days	Date	Date	8 Days								
1971	8-12	0.199	8-12	0.092	8-12	0.127	8-12	0.171	8-12	0.171	8-12	0.171	8-12	0.176	8-12	0.240	8-8	0.241										
MAXIMUMS FOR PERIOD OF RECORD																												
4-30	0.320	4-30	0.200	4-30	0.240	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250							
1966		1966		1966		1966		1966		1966		1966		1966		1966		1966		1966								

NOTES: Watershed conditions: Rangeland - 100% range in low good condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.10-4. Precipitation data from rain gage 18. Precipitation and runoff records began January 1966. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.45	0.0	0.0	0.0	0.0													
3	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E													
7	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.51	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.11E	0.08	0.0	1.41	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	1.42	0.0	1.77	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.39	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.29	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.92	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	1.97	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.16E	0.0													
19	0.0	0.0	0.0	0.08E	0.13E	0.0	0.0	0.0	0.0	0.20E	1.86	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.16E	0.0	0.0	0.0	2.22	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.08E													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.73	0.0	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.38	0.0	0.10E	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.45	0.0	0.0	0.0	0.0	2.14	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.72	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.24E	0.54	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.0	0.61	0.04	2.05	1.02	5.23	3.69	9.62	2.38	4.84	0.08	0.97													
STA AV	0.66	1.25	0.82	3.31	2.01	2.62	2.50	4.08	3.18	2.84	1.26	0.55													

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001-1. Precipitation data obtained from rain gage 18. Records began January 1966. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs)					SONORA, TEXAS WATERSHED W-4							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0020	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.325	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0040	0.0	0.0	0.0	0.054	0.0	0.012	0.0	0.0

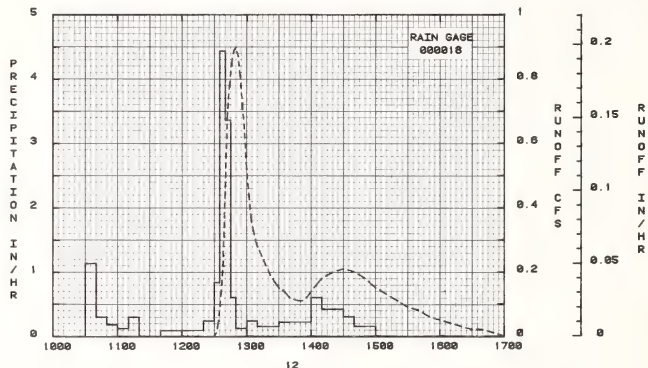
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 5.289256. Records began January 1966. STA AV based on 6 yr record period.

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED W-4					
PRECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 12, 1971											
EG 000018			EG 000018								
8-12	0.0	0.0	8-12	1030	0.0	0.0	8-12	1230	0.0	0.0	
				1040	0.1400	0.19		1232	0.013	0.0	
				1050	0.2999	0.24		1234	0.049	0.0002	
				1100	0.1800	0.27		1236	0.134	0.0008	
				1110	0.1200	0.29		1238	0.218	0.0022	
WATERSHED CONDITIONS:											
100% rangeland; range in											
low good condition.											
				1120	0.3000	0.34		1240	0.447	0.0045	
				1140	0.0	0.34		1242	0.676	0.0089	
				1200	0.0900	0.37		1244	0.780	0.0139	
				1220	0.0900	0.40		1246	0.854	0.0202	
				1230	0.2401	0.44		1248	0.890	0.0262	
				1235	0.8399	0.51		1250	0.903	0.0331	
				1240	4.4400	0.88		1252	0.870	0.0392	
				1245	3.3600	1.16		1254	0.797	0.0457	
				1250	0.6000	1.21		1256	0.719	0.0509	
				1300	0.1200	1.23		1258	0.632	0.0561	
				1310	0.2400	1.27		1300	0.520	0.0606	
				1330	0.1500	1.32		1302	0.445	0.0639	
				1400	0.2200	1.43		1304	0.374	0.0671	
				1410	0.6000	1.53		1306	0.332	0.0695	
				1420	0.4200	1.60		1308	0.304	0.0720	
				1430	0.4200	1.67		1310	0.282	0.0740	
				1440	0.3000	1.72		1314	0.248	0.0779	
				1500	0.1500	1.77		1318	0.219	0.0813	
								1322	0.193	0.0843	
								1326	0.172	0.0870	
								1330	0.153	0.0895	
								1335	0.139	0.0921	
								1340	0.123	0.0945	
								1348	0.107	0.0979	
								1352	0.111	0.0995	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.220386.

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED #4					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 12, 1971 (CONTINUED)											
							8-12	1356	0.122	0.1012	
								1400	0.136	0.1032	
								1405	0.157	0.1059	
								1410	0.175	0.1089	
								1415	0.167	0.1123	
								1420	0.198	0.1158	
								1430	0.213	0.1234	
								1440	0.197	0.1308	
								1450	0.175	0.1377	
								1500	0.152	0.1438	
								1510	0.126	0.1488	
								1520	0.106	0.1531	
								1530	0.089	0.1567	
								1540	0.077	0.1597	
								1550	0.061	0.1623	
								1600	0.054	0.1644	
								1610	0.042	0.1661	
								1620	0.032	0.1675	
								1630	0.022	0.1685	
								1640	0.017	0.1692	
								1650	0.010	0.1697	
								1700	0.004	0.1700	
								1800	0.002	0.1707	
								1900	0.0	0.1709	
								2400	0.0	0.1709	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.220386.



EVENT OF AUGUST 12, 1971  
SONORA, TEXAS WATERSHED #4

## SONORA, TEXAS WATERSHED W-5

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 7.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-5													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
P	0.0	0.62	0.04	1.91	1.04	5.69	3.27	9.24	2.35	4.57	0.06	0.82	29.61														
Q	0.0	0.0	0.0	0.003	0.0	0.318	0.003	2.567	0.003	0.177	0.0	0.0	3.071														
STA AV	0.62	1.11	0.78	3.14	1.91	2.62	2.22	3.97	2.73	2.68	1.12	0.50	23.38														
Q	0.0	0.0	0.0	0.195	0.011	0.123	0.004	0.448	0.001	0.134	0.0	0.0	0.916														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														SONORA, TEXAS WATERSHED W-5													
Maximum Discharge				Maximum Volume for Selected Time Interval																							
Date	Date	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date																			
1971	8-12 1.177	8-12 0.526	8-12 0.709	8-12 0.933	8-2 1.023	8-1 1.070	8-11 1.104	8-7 1.484																			
MAXIMUMS FOR PERIOD OF RECORD																											
4-30 1.380	4-30 0.790	4-30 1.010	4-30 1.080	4-30 1.080	4-30 1.080	4-29 1.130	8-7 1.484																				
1966	1966	1966	1966	1966	1966	1966	1971																				

NOTES: Watershed conditions: Rangeland - 100%; range overgrazed, low poor condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70-11-5. Precipitation data from rain gauge 19. Precipitation and runoff records began January 1966. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-5											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.29	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	1.45	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.43	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.33	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0											
11	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	1.32	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	1.58	0.0	1.70	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.31	0.0	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.13E	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.38	0.0	1.05	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	1.85	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.20E	0.0	0.0											
19	0.0	0.0	0.0	0.06E	0.18E	0.0	0.0	0.0	0.18E	1.77	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.18E	0.0	0.0	0.0	2.50	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.06E	0.0											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.05E	0.0	0.0	0.0	0.0											
25	0.0	0.44	0.0	0.0	0.0	0.0	2.90	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.0	0.68	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.26	0.48	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25E	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.0	0.62	0.04	1.91	1.04	5.69	3.27	9.24	2.35	4.57	0.06	0.82											
STA AV	0.62	1.11	0.78	3.14	1.91	2.62	2.22	3.97	2.73	2.68	1.12	0.50											

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, 70-00-1. Precipitation data obtained from rain gauge 19. Records began January 1966. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971 MEAN DAILY DISCHARGE (cfs) SONORA, TEXAS WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.314	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.288	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.115	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.053	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.096	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0032	0.0	0.0250	0.0	0.0017	0.0	0.0
INCHES	0.0	0.0	0.0	0.003	0.0	0.118	0.003	2.567	0.003	0.177	0.0	0.0
STA AV	0.0	0.0	0.0	0.195	0.011	0.123	0.004	0.448	0.001	0.134	0.0	0.0

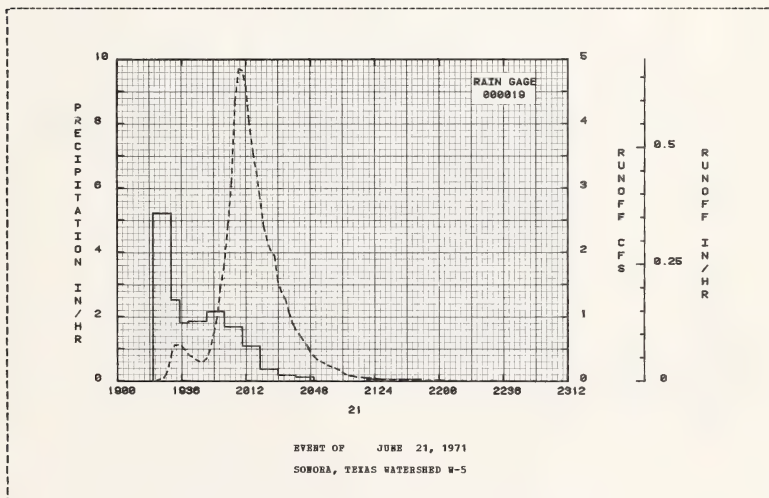
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 3.305785. Records began January 1966. STA AV based on 6 yr record period.

1971 SELECTED RUNOFF EVENT SONORA, TEXAS WATERSHED W-5												
PRECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-day	(inches)	(inches)	Mo-day	of Day	(in/hr)	(inches)	Mo-day	of Day	(cfs)	(inches)		
EVENT OF JUNE 21, 1971												
RG 000019												
6-21	0.0	0.0	6-21	1920	0.0	0.0	6-21	1922	0.009	0.0		
				1930	5.2198	0.07		1924	0.030	0.0001		
				1935	2.5202	1.08		1926	0.053	0.0003		
				1940	1.8001	1.23		1928	0.155	0.0008		
				1950	1.8599	1.54		1930	0.388	0.0021		
WATERSHED CONDITIONS:												
100% range overgrazed,												
low poor condition.												
				2000	2.1599	1.90		1932	0.558	0.0041		
				2010	1.6801	2.18		1934	0.558	0.0068		
				2020	1.0800	2.36		1936	0.583	0.0092		
				2030	0.3600	2.42		1938	0.478	0.0117		
				2040	0.1800	2.45		1940	0.400	0.0136		
				2050	0.1200	2.47		1942	0.365	0.0155		
				2120	0.0	2.47		1944	0.332	0.0170		
				2150	0.0600	2.50		1946	0.304	0.0185		
								1948	0.300	0.0198		
								1950	0.346	0.0214		
								1952	0.487	0.0232		
								1954	0.738	0.0262		
								1956	1.003	0.0299		
								1958	1.499	0.0360		
								2000	1.834	0.0441		
								2002	2.424	0.0533		
								2004	3.083	0.0666		
								2006	4.338	0.0826		
								2008	4.868	0.1088		
								2010	4.816	0.1256		
								2012	4.566	0.1403		
								2014	3.983	0.1667		
								2016	3.545	0.1849		
								2018	3.247	0.1995		
								2020	2.826	0.2182		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.1377410.

1971	SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED W-5					
ANTICIPED CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF JUNE 21, 1971 (CONTINUED)												
							6-21	2022	2.403	0.2255		
								2024	2.181	0.2366		
								2026	2.019	0.2456		
								2028	1.937	0.2552		
								2030	1.533	0.2636		
								2032	1.380	0.2699		
								2034	1.278	0.2763		
								2036	1.066	0.2813		
								2038	0.900	0.2861		
								2040	0.785	0.2897		
								2042	0.706	0.2933		
								2044	0.627	0.2962		
								2046	0.548	0.2990		
								2048	0.447	0.3011		
								2050	0.376	0.3031		
								2052	0.332	0.3046		
								2054	0.297	0.3061		
								2056	0.266	0.3073		
								2058	0.236	0.3085		
								2100	0.216	0.3096		
								2102	0.197	0.3105		
								2104	0.165	0.3114		
								2106	0.127	0.3120		
								2108	0.098	0.3125		
								2110	0.081	0.3129		
								2114	0.062	0.3136		
								2118	0.052	0.3141		
								2122	0.039	0.3145		
								2126	0.031	0.3148		
								2130	0.021	0.3151		
								2140	0.017	0.3155		
								2150	0.013	0.3158		
								2200	0.009	0.3161		
								2210	0.005	0.3163		
								2230	0.002	0.3165		
								2300	0.0	0.3166		
								2350	0.0	0.3166		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.1377410.



## SONORA, TEXAS WATERSHED W-6

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 6.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-6				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1971 P	0.0	0.68	0.07	2.13	1.02	4.97	4.34	9.92	2.20	4.60	0.09	0.98	31.00					
	Q	0.0	0.0	0.0	0.0	0.028	0.027	1.106	0.0	0.0	0.0	0.0	1.160					
STA AV P	0.68	1.21	0.89	3.31	2.00	2.52	2.44	4.15	3.03	2.78	1.36	0.52	24.88					
	Q	0.0	0.0	0.153	0.007	0.018	0.005	0.191	0.0	0.009	0.0	0.0	0.383					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																		
Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval												
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1971	8-12	0.691	8-12	0.356	8-12	0.474	8-12	0.622	8-12	0.628	8-12	0.650	8-13	0.650	8-7	0.788		
MAXIMUMS FOR PERIOD OF RECORD																		
4-30	1.900	4-30	0.840	4-30	0.910	4-30	0.910	4-30	0.910	4-30	0.910	4-29	0.910	4-24	0.920			
1966		1966		1966		1966		1966		1966		1966		1966				

NOTES: Watershed conditions: Rangeland - 100%; range condition - poor. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70-12-4. Precipitation data from rain gage 20. Precipitation and runoff records began January 1966. For long-time precipitation records, see National Weather Service Weather Bureau records at the Texas Agricultural Experiment Station, Substation No. 14, 19 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-6				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0	0.0	0.0	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.45	0.0	0.0	0.0	0.0				
3	0.0	0.0	0.078	0.0	0.0	0.0	0.0	0.0	0.0	1.39	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.208	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.15E
7	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.48	0.0	0.0	0.0	0.0				0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0				0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29				0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0				0.0
11	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	1.46	0.0	0.0	0.0	0.0				0.0
12	0.0	0.0	0.0	0.0	0.0	1.54	0.0	1.91	0.0	0.0	0.0	0.0				0.0
13	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.39	0.0	0.0	0.0	0.0				0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.20E	0.0	0.0	0.0	0.0				0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.20E	0.0	1.01	0.0	0.0	0.0				0.0
16	0.0	0.0	0.0	2.06	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0				0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.16E	0.0	0.0				0.0
19	0.0	0.0	0.0	0.07E	0.24E	0.0	0.0	0.0	0.19E	1.91	0.0	0.0				0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
21	0.0	0.21E	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.0	0.0	0.0				0.0
22	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.03E	0.0	0.09E	0.0				0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0	0.0				0.0
24	0.0	0.0	0.0	0.0	0.35	0.0	0.05E	0.0	0.0	0.0	0.0	0.0				0.0
25	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	3.45	0.0	0.0	0.58	0.0	0.0				0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0				0.0
28	0.0	0.0	0.0	0.0	0.0	0.28	0.78	0.0	0.0	0.0	0.0	0.0				0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0				0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
TOTAL	0.68	0.68	0.07	2.13	1.02	4.97	4.34	9.92	2.20	4.60	0.09	0.90				
STA AV	6.68	1.21	0.89	3.31	2.00	2.52	2.44	4.15	3.03	2.78	1.36	0.52				

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001-1. Precipitation data obtained from rain gage 20. Records began January 1966. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

1971						SONORA, TEXAS WATERSHED #=6						
MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.092	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.182	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0003	0.0003	0.0103	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.028	0.027	1.106	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.153	0.007	0.018	0.005	0.191	0.0	0.009	0.0	0.0

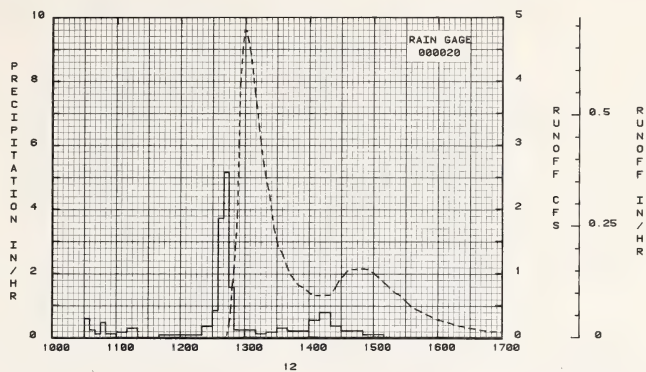
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 3.449515. Records began January 1966. STA AV based on 6 yr record period.

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED #6				
PRECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date No-Day	Rainfall (inches)	Runoff (inches)	Date No-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date No-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 12, 1971										
RG 000020			RG 000020							
8-12	0.0	0.0	8-12	1030	0.0	0.0	8-12	1233	0.0	0.0
				1035	0.6000	0.05		1237	0.0	0.0
				1040	0.2401	0.07		1241	0.004	0.0
				1045	0.1199	0.08		1242	0.010	0.0
				1050	0.4799	0.12		1243	0.039	0.0001
				1100	0.1200	0.14		1244	0.094	0.0002
				1110	0.1800	0.17		1245	0.184	0.0006
				1120	0.3000	0.22		1246	0.295	0.0011
				1140	0.0	0.22		1247	0.5066	0.0020
				1200	0.0900	0.25		1248	0.782	0.0034
				1220	0.0900	0.28		1249	0.913	0.0058
				1230	0.3600	0.34		1250	1.131	0.0081
				1235	0.8401	0.41		1251	1.401	0.0109
				1240	3.7200	0.72		1252	1.628	0.0143
				1245	5.1599	1.15		1253	1.994	0.0194
				1250	1.5601	1.28		1254	3.011	0.0250
				1300	0.2401	1.32		1255	3.983	0.0329
				1310	0.2400	1.36		1257	4.471	0.0543
				1320	0.1200	1.38		1259	4.807	0.0751
				1330	0.1800	1.41		1301	4.783	0.0993
				1340	0.3000	1.46		1303	4.606	0.1204
				1400	0.2100	1.53		1305	4.416	0.1432
				1410	0.5400	1.62		1307	4.117	0.1624
				1420	0.7800	1.75		1309	3.829	0.1825
				1430	0.3600	1.81		1311	3.573	0.1991
				1450	0.2100	1.88		1313	3.293	0.2164
				1510	0.0900	1.91		1315	2.999	0.2323
								1317	2.741	0.2452
								1319	2.553	0.2586
								1321	2.371	0.2697

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.143730.

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED #4-6						
ANTECEDENT CONDITIONS			RAINFALL			SUBOFF						
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Date Mo-Day	Time of Day	Rate (cfs)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 12, 1971 (CONTINUED)												
						8-12	1323	2.197			0.2812	
							1327	1.698			0.2998	
							1331	1.417			0.3147	
							1335	1.297			0.3277	
							1339	1.109			0.3392	
							1343	0.966			0.3491	
							1346	0.900			0.3559	
							1350	0.808			0.3641	
							1354	0.777			0.3717	
							1358	0.733			0.3789	
							1402	0.671			0.3856	
							1406	0.650			0.3919	
							1420	0.661			0.4180	
							1424	0.757			0.4208	
							1428	0.883			0.4286	
							1432	0.956			0.4374	
							1436	1.038			0.4469	
							1440	1.059			0.4569	
							1450	1.070			0.4626	
							1455	1.056			0.4951	
							1500	0.997			0.5078	
							1505	0.932			0.5192	
							1510	0.888			0.5297	
							1515	0.768			0.5397	
							1520	0.695			0.5483	
							1525	0.653			0.5562	
							1530	0.555			0.5637	
							1535	0.481			0.5698	
							1540	0.434			0.5752	
							1545	0.390			0.5803	
							1550	0.350			0.5847	
							1555	0.311			0.5886	
							1600	0.271			0.5922	
							1605	0.251			0.5953	
							1610	0.231			0.5981	
							1615	0.201			0.6008	
							1620	0.183			0.6031	
							1625	0.162			0.6051	
							1630	0.142			0.6070	
							1635	0.126			0.6086	
							1640	0.114			0.6100	
							1645	0.102			0.6113	
							1650	0.092			0.6124	
							1700	0.076			0.6144	
							1710	0.059			0.6160	
							1720	0.049			0.6173	
							1740	0.033			0.6193	
							1800	0.022			0.6206	
							1830	0.012			0.6218	
							1900	0.010			0.6226	
							2400	0.004			0.6276	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.143730.



EVENT OF AUGUST 12, 1971  
SOWORA, TEXAS WATERSHED W-6

## SONORA, TEXAS WATERSHED W-7

LOCATION: Sutton County, Texas; 10 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 12.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-7													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	0.0	1.27	0.0	3.08	0.46	1.34	3.95	7.80	2.58	4.02	0.50	0.77	25.77														
	Q	0.0	0.0	0.013	0.0	0.0	0.026	0.015	0.000	0.001	0.0	0.0	0.054														
STA AV P	0.59	1.31	0.97	2.52	2.72	1.85	1.80	2.07	2.70	2.05	1.26	0.87	20.73														
	Q	0.0	0.0	0.023	0.086	0.107	0.004	0.002	0.009	0.000	0.0	0.002	0.232														
1967																											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1971	4-16	0.025		7-27	0.013		7-27	0.019		7-27	0.025		7-27	0.025		7-27	0.025		7-30	0.026		7-24	0.029				
1967																											
MAXIMUMS FOR PERIOD OF RECORD																											
6-2		0.910		6-2	0.570		6-2	0.660		6-2	0.660		6-2	0.660		6-2	0.730		6-2	0.730		6-2	0.730				
1967				1967			1967			1967			1967			1967			1967			1967					

NOTES: Watershed conditions: Rangeland - 100%; range condition - high fair. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.13-6. Precipitation data from rain gage 1. Precipitation and runoff records began January 1965. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1971 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.81	0.0	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.22	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.32	0.0	0.40	0.14E	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22E													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.89	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.19E	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.71	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	2.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0													
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.15E	0.0	0.0													
19	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.35	0.98	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.22E	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.45	0.0	0.36	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	1.50	0.0	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0													
25	0.0	1.05	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.64	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.09E	0.0	2.18	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.0	0.0	0.02	0.0	0.17E	0.44	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.0	1.27	0.0	3.08	0.46	1.34	3.95	7.80	2.58	4.02	0.50	0.77													
STA AV	0.59	1.31	0.97	2.52	2.72	1.85	1.80	2.07	2.70	2.05	1.26	0.87													

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-10, p. 70.001-1. Precipitation data obtained from rain gage 1. Records began January 1965. STA AV based on 7 yr record period. Estimate codes may indicate that non-significant event totals are included.

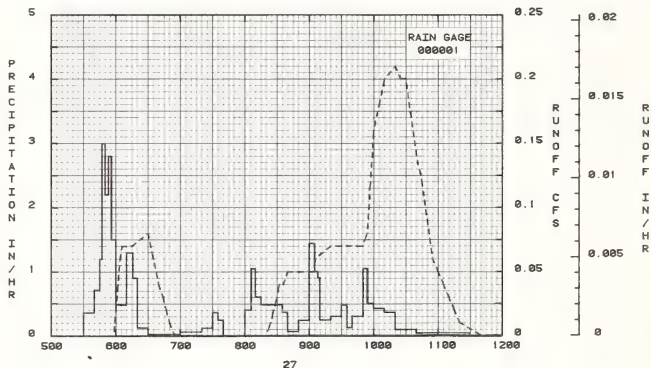
1971 MEAN DAILY DISCHARGE (cfs)													SONORA, TEXAS WATERSHED W-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0002	0.0	0.0	0.0004	0.0002	0.0	0.0	0.0	MEAN	0.0	0.0	0.0	0.0013	0.0	0.0026	0.015	0.000	0.001	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.026	0.015	0.000	0.001	0.0	INCHES	0.0	0.0	0.0	0.023	0.086	0.107	0.004	0.002	0.009	0.000	0.0	
STA AV	0.0	0.0	0.0	0.0	0.023	0.086	0.107	0.004	0.002	0.009	0.000	0.0	STA AV	0.0	0.0	0.0	0.023	0.086	0.107	0.004	0.002	0.009	0.000	0.0	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.950955. Records began January 1965. STA AV based on 7 yr record period.

1971      SELECTED RUNOFF EVENT													SONORA, TEXAS WATERSHED W-7												
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF													
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.															
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)															
EVENT OF JULY 27, 1971																									
EG 000001			EG 000001																						
7-27	0.0	0.0	7-27	530	0.0	0.0	7-27	556	0.0	0.0															
				535	0.3600	0.03		558	0.004	0.0															
				540	0.3600	0.06		600	0.021	0.0															
				545	0.7200	0.12		602	0.040	0.0001															
				547	1.2000	0.16		604	0.056	0.0002															
WATERSHED CONDITIONS:				550	3.0000	0.31		606	0.068	0.0004															
Bangeland - 100%, range				553	2.2000	0.42		610	0.070	0.0008															
condition - high fair.				556	2.8000	0.56		615	0.067	0.0013															
				600	1.5000	0.66		630	0.078	0.0028															
				605	0.4800	0.70		635	0.062	0.0033															
				610	0.4800	0.74		640	0.042	0.0036															
				616	1.3000	0.87		644	0.029	0.0038															
				618	0.9000	0.90		647	0.019	0.0039															
				620	0.5000	0.93		650	0.009	0.0040															
				630	0.1200	0.95		655	0.004	0.0040															
				700	0.0200	0.96		700	0.004	0.0040															
				720	0.0600	0.98		720	0.0	0.0041															
				730	0.1200	1.00		740	0.0	0.0041															
				735	0.3600	1.03		810	0.0	0.0041															
				740	0.2400	1.05		818	0.0	0.0041															
				800	0.0	1.05		820	0.003	0.0041															
				805	0.0000	1.09		824	0.006	0.0041															
				810	1.0500	1.16		827	0.016	0.0041															
				816	0.4800	1.21		830	0.030	0.0042															
				820	0.4800	1.25		832	0.038	0.0043															
				830	0.4800	1.33		836	0.043	0.0045															
				835	0.4800	1.37		840	0.048	0.0047															
				840	0.3600	1.40		850	0.048	0.0054															
				850	0.0600	1.41		900	0.045	0.0060															
				900	0.2400	1.45		904	0.049	0.0063															

1971 SELECTED RUNOFF EVENT						SONORA, TEXAS WATERSHED W-7					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
No-Day	(inches)	(inches)	No-Day	of Day	(in/hr)	(inches)	No-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 27, 1971 (CONTINUED)											
7-27	905	1.4400	1.57	7-27	906	0.059	0.0064				
	908	1.0000	1.62		920	0.067	0.0076				
	910	0.9000	1.65		930	0.068	0.0085				
	920	0.2400	1.69		950	0.066	0.0103				
	930	0.3000	1.74		954	0.084	0.0107				
	935	0.4800	1.78		957	0.119	0.0111				
	940	0.1200	1.79		1000	0.158	0.0117				
	950	0.1000	1.84		1005	0.179	0.0124				
	954	1.0500	1.91		1010	0.203	0.0141				
	1000	0.5000	1.96		1020	0.209	0.0169				
	1010	0.4200	2.03		1025	0.205	0.0183				
	1020	0.3600	2.09		1030	0.197	0.0197				
	1040	0.0900	2.12		1035	0.167	0.0209				
	1130	0.0360	2.15		1040	0.140	0.0219				
					1045	0.117	0.0228				
					1050	0.092	0.0235				
					1055	0.064	0.0240				
					1100	0.049	0.0244				
					1105	0.035	0.0247				
					1110	0.026	0.0249				
					1115	0.017	0.0251				
					1120	0.010	0.0252				
					1140	0.001	0.0253				
					1200	0.0	0.0253				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.081290.



EVENT OF JULY 27, 1971  
SONORA, TEXAS WATERSHED W-7

## TREYNOR, IOWA WATERSHED 1

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Silver Creek, West Ninhabotna River, Missouri River Basin.

AREA: 74.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 1													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971	P	0.53	1.17	0.30	0.86	8.86	4.13	1.79	1.23	0.39	4.65	4.00	0.93	28.84													
	Q	0.163	0.665	0.558	0.154	3.955	0.425	0.301	0.185	0.125	0.173	0.182	0.143	7.029													
STA AV	P	0.50	0.59	0.84	3.07	4.64	6.68	3.74	3.71	4.03	3.08	1.19	0.87	32.93													
	Q	0.307	0.561	0.543	0.336	1.077	2.271	0.376	0.458	0.535	0.296	0.229	0.215	7.204													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge													Maximum Volume for Selected Time Interval														
Date	Rate	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1971	5-18	3.180	5-18	0.933	5-18	1.180	5-17	1.568	5-17	1.710	5-17	1.822	5-17	1.838	5-10	3.047											
MAXIMUMS FOR PERIOD OF RECORD																											
	6-20	5.835	6-20	3.150	6-20	4.160	6-20	4.224	6-20	4.232	6-20	4.246	6-20	4.264	6-4	5.979											
	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967											

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rain gage 117 before April 1 and after November 1; Thiessen average of gages 116, 117, 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 10, 1964. January 1 to February 10, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Risc. Pub. 1194, p. 71.1-5. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1971 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.0	1.68	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.25	0.0	0.0													
3	0.48	0.0	0.0	0.0	0.0	0.0	0.35	0.22	0.0	0.0	0.0	0.02													
4	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.36	0.02	0.0	0.0	0.08													
5	0.0	0.0	0.06	0.0	0.0	0.20	0.09	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	1.79	0.16	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.06	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.10	0.10													
9	0.0	0.0	0.0	0.0	0.0	0.82	0.75	0.76	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	2.07	0.17	0.60	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10													
16	0.0	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.0	0.40	0.0													
17	0.0	0.0	0.0	0.0	0.93	0.0	0.02	0.0	0.0	0.0	1.13	0.0													
18	0.0	0.33	0.0	0.0	2.51	0.33	0.03	0.0	0.0	0.47	0.0	0.0													
19	0.0	0.27	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0													
21	0.0	0.06	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.39	0.02	0.0	0.0	0.57	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.14	0.0													
24	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.16	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.10	0.0	0.0	0.0	0.03	0.0	0.27	0.0	0.0	0.0													
26	0.0	0.02	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.07	0.10	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.76	0.0	0.05													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0													
29	0.05	0.0	0.0	0.0	0.0	1.91	0.0	0.06	0.0	2.07	0.0	0.58													
30	0.0	0.0	0.28	0.0	0.25	0.15	0.0	0.0	0.0	0.91	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.53	1.17	0.30	0.86	8.86	4.13	1.79	1.23	0.39	4.65	4.00	0.93													
STA AV	0.50	0.59	0.84	3.07	4.64	6.68	3.74	3.71	4.03	3.08	1.19	0.87													

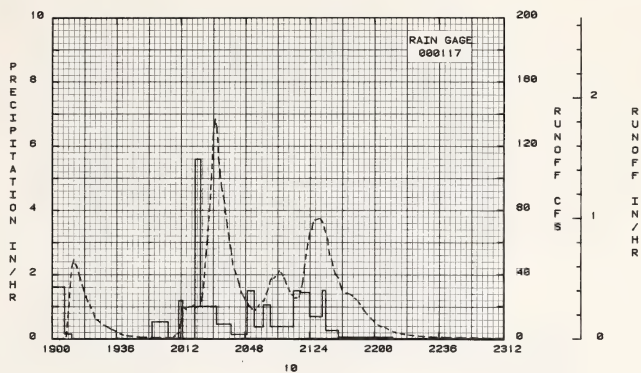
NOTES: Daily precipitation amounts are from rain gage 117 before April 1 and after November 1; Thiessen weighted average values from stations 116, 117, and 118 for remainder of year. STA AV based on 8 yr record period.



1971 SELECTED RUNOFF EVENT					TETNOS, IOWA WATERSHED 1				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(inches)
EVENT OF MAY 10 - 11, 1971 (CONTINUED)									
							5-10	1933	6.022 0.1255
								1934	5.462 0.1268
								1936	4.411 0.1290
								1938	2.981 0.1306
								1940	2.351 0.1318
								1942	1.810 0.1327
								1945	1.856 0.1338
								1948	1.950 0.1346
								1953	0.808 0.1357
								1958	0.663 0.1365
								2004	0.557 0.1373
								2007	0.557 0.1377
								2008	0.969 0.1379
								2009	1.981 0.1382
								2010	3.096 0.1388
								2011	3.811 0.1396
								2012	9.243 0.1411
								2013	19.797 0.1443
								2014	19.036 0.1486
								2015	18.286 0.1528
								2016	19.416 0.1570
								2017	20.171 0.1614
								2018	19.797 0.1658
								2019	20.927 0.1704
								2020	19.416 0.1749
								2023	20.547 0.1882
								2024	25.773 0.1933
								2025	35.401 0.2001
								2026	52.607 0.2098
								2027	64.331 0.2229
								2028	80.967 0.2390
								2029	99.933 0.2590
								2030	128.682 0.2846
								2031	136.770 0.3139
								2032	131.143 0.3415
								2033	111.536 0.3703
								2034	99.933 0.3940
								2035	92.050 0.4152
								2036	87.284 0.4350
								2037	77.386 0.4532
								2038	69.003 0.4696
								2039	61.220 0.4840
								2040	55.399 0.4969
								2041	46.025 0.5001
								2043	39.943 0.5272
								2045	32.291 0.5433
								2046	28.349 0.5500
								2048	24.268 0.5616
								2050	20.547 0.5716
								2052	18.286 0.5802
								2053	17.191 0.5882
								2054	18.286 0.5881
								2055	19.797 0.5923
								2056	21.307 0.5968
								2058	23.423 0.6068
								2059	25.114 0.6122
								2100	28.615 0.6182
								2101	31.260 0.6248
								2102	36.542 0.6323
								2103	37.672 0.6405
								2104	37.672 0.6489
								2105	38.813 0.6574
								2106	39.943 0.6661
								2107	42.324 0.6752
								2108	41.084 0.6846
								2109	39.378 0.6935
								2110	37.672 0.7020
								2111	33.846 0.7099
								2112	31.260 0.7172
								2113	29.280 0.7239
								2114	27.409 0.7302
								2115	26.479 0.7362
								2116	25.538 0.7419
								2117	25.538 0.7475
								2118	26.008 0.7532

NOTES: To convert runoff in CFS to I#/HR, multiply by 0.01331. Event precipitation totals for rain gages 116 and 118 are 1.84 and 1.70 in., respectively and Thiessen weighted average total for event is 1.65 in.

1971 SELECTED RUNOFF EVENT			TREYNOR, IOWA WATERSHED 1								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 10 - 11, 1971 (CONTINUED)											
							5-10				
								2119	29.280	0.7594	
								2120	34.882	0.7665	
								2121	43.554	0.7752	
								2122	52.607	0.7858	
								2123	59.034	0.7983	
								2124	65.891	0.8121	
								2125	68.222	0.8269	
								2126	72.354	0.8424	
								2127	74.035	0.8588	
								2129	74.870	0.8917	
								2130	74.870	0.9085	
								2131	72.354	0.9248	
								2132	69.003	0.9404	
								2134	61.220	0.9694	
								2135	51.937	0.9819	
								2136	49.266	0.9931	
								2137	45.410	1.0036	
								2138	40.513	1.0132	
								2140	37.672	1.0305	
								2141	33.846	1.0384	
								2142	30.220	1.0456	
								2144	28.349	1.0585	
								2145	28.349	1.0649	
								2146	27.879	1.0711	
								2148	26.479	1.0831	
								2149	25.114	1.0889	
								2150	24.268	1.0944	
								2151	22.997	1.0996	
								2152	21.307	1.1045	
								2154	17.906	1.1132	
								2156	14.865	1.1204	
								2158	12.729	1.1265	
								2200	10.503	1.1317	
								2202	8.518	1.1359	
								2204	7.442	1.1395	
								2206	7.013	1.1427	
								2208	5.647	1.1455	
								2210	4.411	1.1477	
								2212	3.811	1.1495	
								2215	3.096	1.1518	
								2217	2.656	1.1531	
								2219	2.256	1.1542	
								2222	1.810	1.1555	
								2225	1.490	1.1566	
								2228	1.246	1.1575	
								2231	1.090	1.1583	
								2235	0.859	1.1592	
								2240	0.757	1.1601	
								2248	0.577	1.1613	
								2255	0.427	1.1621	
								2305	0.306	1.1629	
								2315	0.208	1.1635	
								2325	0.149	1.1639	
								2336	0.116	1.1642	
								2400	0.116	1.1648	
								5-11	100	0.089	1.1662
								300	0.076	1.1684	



EVENT OF MAY 10 - 11, 1971  
TIPTON, IOWA WATERSHED 1

## TREYNOR, IOWA WATERSHED 2

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Keg Creek, Missouri River Basin.

AREA: 82.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TREYNOR, IOWA WATERSHED 2												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	0.53	1.17	0.30	0.82	8.73	4.05	1.70	1.45	0.51	4.74	4.06	0.93	28.99											
	Q	0.272	0.927	0.818	0.234	2.612	0.412	0.288	0.204	0.143	0.178	0.201	0.172	6.461											
STA AV	P	0.50	0.59	0.91	3.04	4.57	6.64	3.65	3.59	4.07	3.06	1.21	0.87	32.71											
	Q	0.330	0.655	0.596	0.319	0.882	2.132	0.315	0.400	0.497	0.300	0.222	0.217	6.864											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days							
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Date	Date	Date	Date	Vol.
1971		5-18	2.559	5-18	0.650	5-18	0.781	5-17	0.950	5-17	1.039	5-17	1.151	5-17	1.169	5-10	2.049								
MAXIMUMS FOR PERIOD OF RECORD																									
		6-20	4.866	6-20	2.701	6-20	3.693	6-20	3.786	6-20	3.796	6-20	3.796	6-20	3.810	6-4	5.531								
		1967		1967		1967		1967		1967		1967		1967		1967									

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rains gage 117 before April 1 and after November 1; Thiessen average of rain gages 115, 116, and 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 3, 1964. January 1 to February 3, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71-2-5. For long-time precipitation records, see National Weather Service records period at Omaha, Nebraska.

1971 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.0	1.74	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.26	0.0	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.48	0.0	0.0	0.0	0.0	0.0	0.31	0.21	0.0	0.0	0.0	0.02	3	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.02	0.0	0.0	0.08	
4	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.06	0.0	0.26	0.10	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	1.74	0.11	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.05	0.0	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.10	0.10	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.42	0.71	0.78	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	2.20	0.17	0.51	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	
16	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0	0.0	0.0	0.40	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.03	0.0	0.0	1.13	0.0	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.33	0.0	0.0	2.31	0.31	0.04	0.0	0.0	0.50	0.0	0.0	18	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.53	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.06	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.39	0.02	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0	0.0	22	0.0	0.39	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.14	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	
24	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.22	0.07	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.103	0.0	0.29	0.0	0.0	25	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.02	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.10	26	0.0	0.02	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.10	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	
29	0.05	0.0	0.0	0.0	0.0	1.88	0.0	0.0	0.11	2.05	0.0	0.58	29	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.11	2.05	0.0	0.58	
30	0.0	0.0	0.0	0.24	0.26	0.19	0.0	0.0	0.0	0.91	0.0	0.0	30	0.0	0.0	0.0	0.24	0.26	0.19	0.0	0.0	0.91	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.53	1.17	0.30	0.82	8.73	4.05	1.70	1.45	0.51	4.74	4.06	0.93	TOTAL	0.53	1.17	0.30	0.82	8.73	4.05	1.70	1.45	0.51	4.74	4.06	0.93
STA AV	0.50	0.59	0.91	3.04	4.57	6.64	3.65	3.59	4.07	3.06	1.21	0.87	STA AV	0.50	0.59	0.91	3.04	4.57	6.64	3.65	3.59	4.07	3.06	1.21	0.87

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 115, 116, and 118 for period of April 1 through November 1, and from station 117 for remainder of year. STA AV based on 8 yr record period.

1971 MEAN DAILY DISCHARGE (cfs)													TREYNOR, IOWA WATERSHED 2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	0.027	0.033	0.027	0.030	0.039	0.031	0.023	0.017	0.012	0.117	0.022	1	0.027	0.027	0.033	0.027	0.030	0.039	0.031	0.023	0.017	0.012	0.117	0.022
2	0.027	0.027	0.029	0.027	0.027	0.037	0.029	0.025	0.015	0.018	0.025	0.022	2	0.027	0.027	0.029	0.027	0.027	0.037	0.029	0.025	0.015	0.018	0.025	0.022
3	0.027	0.027	0.029	0.028	0.024	0.037	0.038	0.031	0.015	0.012	0.020	0.022	3	0.027	0.027	0.029	0.028	0.024	0.037	0.038	0.031	0.015	0.012	0.020	0.022
4	0.027	0.027	0.0313	0.027	0.025	0.037	0.031	0.038	0.017	0.015	0.018	0.022	4	0.027	0.027	0.0313	0.027	0.025	0.037	0.031	0.038	0.017	0.015	0.018	0.022
5	0.027	0.027	0.0314	0.027	0.030	0.038	0.031	0.027	0.015	0.016	0.017	0.022	5	0.027	0.027	0.0314	0.027	0.030	0.038	0.031	0.027	0.015	0.016	0.017	0.022
6	0.027	0.027	0.168	0.028	0.477	0.039	0.031	0.026	0.017	0.015	0.017	0.022	6	0.027	0.027	0.168	0.028	0.477	0.039	0.031	0.026	0.017	0.015	0.017	0.022
7	0.027	0.027	0.049	0.027	0.085	0.038	0.030	0.027	0.015	0.018	0.017	0.022	7	0.027	0.027	0.049	0.027	0.085	0.038	0.030	0.027	0.015	0.018	0.017	0.022
8	0.027	0.027	0.126	0.028	0.037	0.037	0.029	0.027	0.016	0.015	0.022	0.019	8	0.027	0.027	0.126	0.028	0.037	0.037	0.029	0.027	0.016	0.015	0.022	0.019
9	0.027	0.027	0.225	0.028	0.135	0.076	0.049	0.025	0.016	0.018	0.018	0.017	9	0.027	0.027	0.225	0.028	0.135	0.076	0.049	0.025	0.016	0.018	0.018	0.017
10	0.027	0.027	0.616	0.026	3.293	0.105	0.146	0.023	0.016	0.014	0.017	0.017	10	0.027	0.027	0.616	0.026	3.293	0.105	0.146	0.023	0.016	0.014	0.017	0.017
11	0.027	0.448	0.322	0.026	0.063	0.034	0.031	0.023	0.016	0.016	0.017	0.017	11	0.027	0.448	0.322	0.026	0.063	0.034	0.031	0.023	0.016	0.016	0.017	0.017
12	0.027	0.053	0.077	0.027	0.045	0.031	0.031	0.021	0.015	0.015	0.017	0.017	12	0.027	0.053	0.077	0.027	0.045	0.031	0.031	0.021	0.015	0.015	0.017	0.017
13	0.027	0.028	0.037	0.028	0.044	0.031	0.028	0.023	0.016	0.014	0.017	0.017	13	0.027	0.028	0.037	0.028	0.044	0.031	0.028	0.023	0.016	0.014	0.017	0.017
14	0.027	0.027	0.035	0.027	0.044	0.033	0.029	0.020	0.016	0.015	0.017	0.017	14	0.027	0.027	0.035	0.027	0.044	0.033	0.029	0.020	0.016	0.015	0.017	0.017
15	0.027	0.282	0.032	0.027	0.043	0.031	0.027	0.022	0.016	0.014	0.017	0.024	15	0.027	0.282	0.032	0.027	0.043	0.031	0.027	0.022	0.016	0.014	0.017	0.024
16	0.027	0.329	0.033	0.029	0.041	0.031	0.025	0.023	0.017	0.015	0.025	0.019	16	0.027	0.329	0.033	0.029	0.041	0.031	0.025	0.023	0.017	0.015	0.025	0.019
17	0.027	0.329	0.031	0.027	0.522	0.031	0.025	0.023	0.017	0.017	0.052	0.017	17	0.027	0.329	0.031	0.027	0.522	0.031	0.025	0.023	0.017	0.017	0.052	0.017
18	0.027	0.749	0.030	0.028	3.538	0.038	0.027	0.023	0.017	0.024	0.023	0.017	18	0.027	0.749	0.030	0.028	3.538	0.038	0.027	0.023	0.017	0.024	0.023	0.017
19	0.027	0.349	0.028	0.027	0.063	0.031	0.027	0.025	0.017	0.017	0.021	0.017	19	0.027	0.349	0.028	0.027	0.063	0.031	0.027	0.025	0.017	0.017	0.021	0.017
20	0.027	0.035	0.029	0.036	0.047	0.030	0.028	0.036	0.018	0.017	0.017	0.017	20	0.027	0.035	0.029	0.036	0.047	0.030	0.028	0.036	0.018	0.017	0.017	0.017
21	0.030	0.027	0.027	0.029	0.048	0.031	0.025	0.026	0.020	0.017	0.017	0.017	21	0.030	0.027	0.027	0.029	0.048	0.031	0.025	0.026	0.020	0.017	0.017	0.017
22	0.028	0.027	0.026	0.025	0.047	0.031	0.027	0.022	0.019	0.017	0.017	0.017	22	0.028	0.027	0.026	0.025	0.047	0.031	0.027	0.022	0.019	0.017	0.017	0.017
23	0.030	0.027	0.025	0.023	0.049	0.031	0.027	0.016	0.019	0.017	0.021	0.022	23	0.030	0.027	0.025	0.023	0.049	0.031	0.027	0.016	0.019	0.017	0.021	0.022
24	0.032	0.028	0.025	0.023	0.052	0.029	0.025	0.023	0.017	0.017	0.019	0.017	24	0.032	0.028	0.025	0.023	0.052	0.029	0.025	0.023	0.017	0.017	0.019	0.017
25	0.034	0.032	0.027	0.023	0.044	0.030	0.028	0.015	0.023	0.017	0.017	0.017	25	0.034	0.032	0.027	0.023	0.044	0.030	0.028	0.015	0.023	0.017	0.017	0.017
26	0.031	0.055	0.028	0.028	0.044	0.028	0.025	0.016	0.018	0.017	0.020	0.017	26	0.031	0.055	0.028	0.028	0.044	0.028	0.025	0.016	0.018	0.017	0.020	0.017
27	0.027	0.086	0.027	0.027	0.041	0.026	0.025	0.017	0.016	0.029	0.017	0.017	27	0.027	0.086	0.027	0.027	0.041	0.026	0.025	0.017	0.016	0.029	0.017	0.017
28	0.027	0.042	0.027	0.025	0.038	0.026	0.025	0.016	0.015	0.017	0.020	0.017	28	0.027	0.042	0.027	0.025	0.038	0.026	0.025	0.016	0.015	0.017	0.020	0.017
29	0.092	0.027	0.027	0.036	0.291	0.025	0.025	0.015	0.016	0.079	0.022	0.030	29	0.092	0.027	0.027	0.036	0.291	0.025	0.025	0.015	0.016	0.079	0.022	0.030
30	0.047	0.026	0.030	0.039	0.039	0.049	0.025	0.017	0.013	0.060	0.022	0.021	30	0.047	0.026	0.030	0.039	0.039	0.049	0.025	0.017	0.013	0.060	0.022	0.021
31	0.027	0.025	0.041	0.041	0.041	0.041	0.023	0.017	0.021	0.021	0.019	0.019	31	0.027	0.025	0.041	0.041	0.041	0.041	0.023	0.017	0.021	0.021	0.019	0.019
MEAN	0.0305	0.1151	0.0918	0.0271	0.2931	0.0477	0.0323	0.0229	0.0166	0.0200	0.0224	0.0193	MEAN	0.0305	0.1151	0.0918	0.0271	0.2931	0.0477	0.0323	0.0229	0.0166	0.0200	0.0224	0.0193
INCHES	0.272	0.927	0.818	0.234	2.612	0.412	0.288	0.204	0.143	0.178	0.201	0.172	INCHES	0.272	0.927	0.818	0.234	2.612	0.412	0.288	0.204	0.143	0.178	0.201	0.172
STA AV	0.330	0.655	0.596	0.319	0.882	2.132	0.315	0.400	0.497	0.300	0.223	0.217	STA AV	0.330	0.655	0.596	0.319	0.882	2.132	0.315	0.400	0.497	0.300	0.223	0.217

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.28746. STA AV based on 8 yr record period.

1971 SELECTED RUNOFF EVENT													TREYNOR, IOWA WATERSHED 2																		
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF																			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 10 - 11, 1971																															
RG 000115																															
5-10	0.39	0.107	5-10	1901	0.0	0.0	5-10	1902	0.055	0.0	1901	0.0	0.0	0.0	1902	0.055	0.0	0.0	1903	0.094	0.0	0.0	1904	0.147	0.0	1905	0.163	0.0	1906	0.214	0.0
				1905	2.8501	0.19																									
				1910	1.4401	0.31																									
				1916	0.3000	0.34																									
				2000	0.0	0.34																									
WATERSHED CONDITIONS:																															
95% Contoured corn, disk and planted 5-3-71; 60% disk in preparation for planting corn, 5% of surface covered by stalk residue; 5% quillies and grassed waterways, grass 5 in. tall.																															
				2007	0.6001	0.41					1907	0.274	0.0	0.0	1908	0.295	0.0001	0.0001	1909	0.395	0.0002	0.0003	1910	0.653	0.0003	0.0003	1911	0.8723	0.0012	0.0012	
				2014	0.0	0.41					1912	13.125	0.0034	0.0034	1913	13.605	0.0061	0.0061	1914	13.605	0.0143	0.0143	1915	14.905	0.0171	0.0171	1916	17.366	0.0203	0.0203	
				2052	0.1500	1.01					1917	17.656	0.0238	0.0238	1918	20.721	0.0273	0.0273	1919	16.495	0.0307	0.0307	1920	15.685	0.0339	0.0339	1921	14.125	0.0369	0.0369	
				2022	0.0	0.49					1922	15.685	0.0339	0.0339	1923	14.125	0.0369	0.0369	1924	13.364	0.0396	0.0396	1925	12.645	0.0422	0.0422	1926	11.444	0.0446	0.0446	
				2028	3.4998	0.84					1927	9.527	0.0467	0.0467	1928	8.343	0.0485	0.0485	1929	7.392	0.0501	0.0501	1930	6.262	0.0528	0.0528	1931	5.642	0.0552	0.0552	
				2034	0.5999	0.94					1932	5.642	0.0552	0.0552	1933	5.092	0.0563	0.0563	1934	4.681	0.0573	0.0573	1935								
				2044	0.3000	0.99					1936				1937				1938				1939				1940				
				2052	0.1500	1.01					1941				1942				1943				1944				1945				
				2058	1.0999	1.12					1946				1947				1948				1949				1950				
				2108	0.6000	1.22					1951				1952				1953				1954				1955				
				2114	0.5000	1.27					1956				1957				1958				1959				1960				
				2121	1.2857	1.42					1961				1962				1963				1964				1965				
				2129	1.0500	1.561					1966				1967				1968				1969				1970				
				2133	0.8500	1.59					1971				1972				1973				1974				1975				
				2139	0.5000	1.64					1976				1977				1978				1979				1980				
				2141	1.8004	1.70					1981				1982				1983				1984				1985				
				2143	0.0	1.70					1986				1987				1988				1989				1990				
				2145	1.1997	1.74					1991				1992				1993				1994				1995				
				2200	0.1500	1.77					1996				1997				1998				1999				2000				
				2215	0.0800	1.79					2001				2002				2003				2004				2005				

1971 SELECTED RUNOFF EVENT			TRETNOE, IOWA WATERSHED 2							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 10 - 11, 1971 (CONTINUED)										
							5-10			
							1936		4.271	0.0582
							1937		4.041	0.0590
							1939		3.451	0.0605
							1941		3.006	0.0618
							1943		2.445	0.0629
							1945		2.000	0.0638
							1948		1.701	0.0649
							1950		1.321	0.0655
							1956		0.999	0.0669
							2000		0.814	0.0676
							2005		0.731	0.0684
							2010		0.692	0.0691
							2011		0.773	0.0692
							2012		1.261	0.0694
							2013		2.081	0.0697
							2014		3.216	0.0702
							2015		4.041	0.0709
							2016		4.542	0.0718
							2017		4.681	0.0727
							2018		4.681	0.0736
							2019		4.271	0.0745
							2020		4.407	0.0754
							2021		7.203	0.0766
							2022		10.573	0.0784
							2023		11.684	0.0806
							2024		12.164	0.0830
							2025		12.884	0.0855
							2026		13.605	0.0881
							2027		17.366	0.0912
							2028		34.647	0.0964
							2029		41.734	0.1040
							2030		51.942	0.1135
							2031		59.124	0.1245
							2032		77.048	0.1380
							2033		110.836	0.1567
							2034		107.235	0.1787
							2035		96.121	0.1989
							2036		89.590	0.2174
							2037		84.153	0.2347
							2038		77.415	0.2510
							2039		68.913	0.2655
							2040		62.280	0.2785
							2041		54.818	0.2901
							2042		49.066	0.3006
							2043		43.219	0.3098
							2044		40.248	0.3181
							2045		34.647	0.3257
							2046		32.481	0.3324
							2047		29.909	0.3386
							2048		26.009	0.3442
							2049		23.888	0.3492
							2050		22.077	0.3538
							2051		18.816	0.3579
							2052		16.495	0.3614
							2053		14.775	0.3646
							2054		14.125	0.3675
							2055		12.764	0.3702
							2056		12.764	0.3727
							2057		13.605	0.3754
							2059		15.425	0.3812
							2100		16.495	0.3884
							2101		17.946	0.3878
							2102		19.766	0.3915
							2103		22.407	0.3957
							2104		25.648	0.4005
							2105		27.179	0.4058
							2106		28.740	0.4114
							2107		29.130	0.4172
							2108		28.349	0.4230
							2109		27.959	0.4286
							2110		27.569	0.4341
							2111		26.009	0.4394
							2112		25.648	0.4446
							2113		24.208	0.4496
							2114		22.768	0.4543

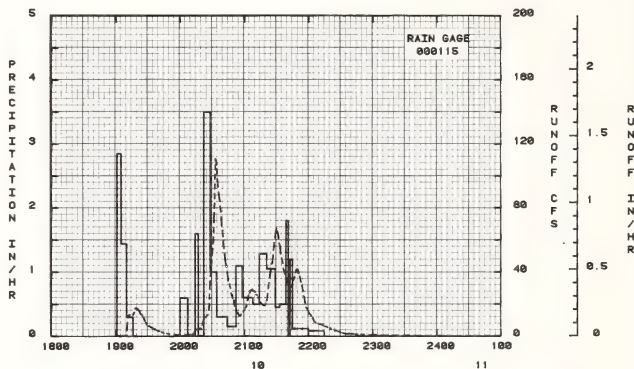
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 1.84 and 1.70 respectively, and Thiessen weighted average total for event is 1.79 in.

1971 SELECTED RUNOFF EVENT							TERYNOT, IOWA WATERSHED 2						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF						
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)			
EVENT OF MAY 10 - 11, 1971 (CONTINUED)													
5-10							2115	21.087	0.4587				
							2116	20.427	0.4628				
							2117	19.766	0.4668				
							2118	19.107	0.4707				
							2119	19.107	0.4746				
							2120	20.097	0.4785				
							2121	22.077	0.4827				
							2122	26.789	0.4876				
							2123	33.331	0.4937				
							2124	37.853	0.5008				
							2125	42.229	0.5088				
							2126	45.855	0.5176				
							2127	50.792	0.5274				
							2128	58.509	0.5383				
							2129	63.591	0.5504				
							2130	67.523	0.5636				
							2131	65.556	0.5768				
							2132	60.970	0.5894				
							2133	57.279	0.6012				
							2134	51.367	0.6122				
							2135	48.531	0.6221				
							2136	45.320	0.6314				
							2137	41.238	0.6400				
							2138	38.763	0.6481				
							2139	36.022	0.6555				
							2141	32.906	0.6692				
							2142	31.195	0.6757				
							2143	31.620	0.6819				
							2144	30.770	0.6881				
							2145	32.481	0.6945				
							2146	35.102	0.7012				
							2147	36.932	0.7084				
							2148	39.753	0.7160				
							2149	41.734	0.7242				
							2150	41.734	0.7325				
							2151	39.258	0.7406				
							2152	37.393	0.7482				
							2153	33.761	0.7554				
							2154	31.620	0.7619				
							2155	27.959	0.7678				
							2156	24.568	0.7730				
							2157	20.756	0.7776				
							2158	17.946	0.7814				
							2159	16.495	0.7848				
							2200	15.425	0.7880				
							2201	13.864	0.7909				
							2202	13.244	0.7936				
							2203	12.404	0.7961				
							2204	11.204	0.7985				
							2205	9.944	0.8006				
							2206	8.913	0.8025				
							2207	8.343	0.8042				
							2209	7.773	0.8074				
							2211	7.392	0.8104				
							2213	6.970	0.8133				
							2214	6.582	0.8146				
							2216	6.030	0.8171				
							2218	5.507	0.8194				
							2220	4.822	0.8215				
							2221	4.542	0.8224				
							2224	3.922	0.8249				
							2226	3.331	0.8263				
							2228	2.911	0.8276				
							2230	2.399	0.8287				
							2232	1.920	0.8296				
							2234	1.560	0.8303				
							2235	1.380	0.8306				
							2236	1.380	0.8309				
							2237	1.380	0.8312				
							2238	1.440	0.8315				
							2240	1.440	0.8321				
							2242	1.321	0.8327				
							2244	1.201	0.8332				
							2246	1.150	0.8337				

NOTES: To convert runoff in CFS to IN/Hr, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 1.84 and 1.70 respectively, and Thiessen weighted average total for event is 1.79 in.

1971 SELECTED RUNOFF EVENT						TREYNOR, IOWA WATERSHED 2					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MAY 10 - 11, 1971 (CONTINUED)											
							5-10	2249	0.951	0.8343	
								2252	0.814	0.8348	
								2259	0.692	0.8359	
								2309	0.548	0.8371	
								2324	0.342	0.8384	
								2334	0.243	0.8390	
								2341	0.179	0.8393	
								2350	0.147	0.8396	
								2400	0.132	0.8399	
							5-11	200	0.105	0.8427	

NOTES: To convert runoff in CFS to in/hr, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 1.84 and 1.70 respectively, and Thiessen weighted average total for event is 1.79 in.



EVENT OF MAY 10 - 11, 1971  
TREYNOR, IOWA WATERSHED 2

AREA: 107.00 ACRES

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 3											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1971	P	0.96	1.14	0.20	1.06	9.56	3.44	1.53	1.51	0.72	4.80	3.91	0.87	29.70											
	Q	0.171	0.705	0.690	0.192	0.967	0.472	0.294	0.183	0.111	0.152	0.204	0.222	4.23											
STA AV	P	0.53	0.61	0.85	3.16	4.63	6.42	3.39	3.20	3.93	3.05	1.15	0.85	31.76											
	Q	0.259	0.541	0.525	0.305	0.393	0.760	0.352	0.247	0.273	0.126	0.226	0.219	4.423											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge				Maximum Volume for Selected Time Interval																			
		Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.								
1971		5-10	0.286	5-10	0.233	5-10	0.327	5-10	0.393	5-10	0.404	5-10	0.419	5-10	0.439	5-10	0.616								
MAXIMUMS FOR PERIOD OF RECORD																									
		6-20	2.010	6-20	1.005	6-20	1.287	6-20	1.336	6-20	1.356	6-20	1.371	2-27	1.408	6-14	1.741								
		1967		1967		1967		1967		1967		1967		1965		1967									

precipitation: arithmetic average of rain gages 113 and 114 before April 1 and after November 1; Thiessen average of gages 112, 113 and 114 for remainder of year. Precipitation records began January 1, 1964. Runoff records began January 2, 1964, January 1, 1964 runoff estimated and included in average. For topographic map of watershed, see . Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.3-4. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1971 DAILY AIR TEMPERATURE (degrees F)													TREYBON, IOWA WATERSHED 3														
Day	Jan	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	min	max	min	min	min	min	min	min	min	min	min	min	min		min	max	min	min	min	min	min	min	min	min	min	min	
1	44	26	18	4	30	20	42	27	60	40	72	56	85	61	89	58	90	64	76	51	50	41	31	22			
2	38	22	30	14	23	12	43	27	58	33	79	53	85	59	84	59	93	68	76	54	53	33	33	25			
3	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26	12	26		
4	12	0	22	12	42	18	48	26	75	48	90	68	82	68	71	60	79	64	74	46	56	29	34	30			
5	4	-8	16	3	36	27	46	23	69	53	92	64	87	66	76	59	86	53	79	52	53	27	35	27			
6	6	-14	14	-2	31	25	60	26	58	52	90	62	88	64	79	57	96	59	78	46	34	18	37	35			
7	10	-14	2	-6	28	18	76	30	55	47	82	59	86	71	72	57	100	60	74	42	32	12	37	31			
8	26	10	6	-12	33	13	76	45	68	43	80	58	83	64	82	64	84	65	62	40	38	29	37	30			
9	18	8	18	8	25	17	67	38	67	38	80	61	87	65	80	61	87	65	62	40	38	29	37	30			
10	22	12	37	8	45	25	74	32	75	55	82	62	85	65	85	65	89	56	76	64	34	38	13				
11	16	0	44	34	53	30	78	55	72	54	86	65	82	66	86	58	86	54	69	41	70	36	41	26			
12	14	-3	34	10	56	34	73	48	64	30	68	68	90	68	70	89	63	94	54	74	39	68	38	15			
13	15	8	23	4	68	34	62	40	81	44	87	64	90	64	93	66	87	52	66	47	68	42	39	23			
14	25	15	25	22	74	46	67	38	58	54	88	68	90	68	90	68	90	68	78	52	66	33	34	24			
15	10	-4	41	22	38	40	82	44	85	58	87	65	85	62	82	62	71	51	79	46	70	38	40	32			
16	23	10	46	34	44	28	70	51	84	56	89	64	91	62	89	61	61	45	80	55	68	57	36	15			
17	20	11	56	32	54	30	78	48	82	63	88	64	90	66	89	60	66	46	78	58	58	40	25	15			
18	17	2	46	38	52	26	70	56	63	49	82	65	85	68	82	62	50	46	74	62	40	30	52	18			
19	14	-7	46	29	32	22	80	61	46	56	74	78	57	88	70	66	40	69	49	46	26	38	26				
20	19	3	37	8	22	25	76	46	69	48	86	65	89	58	81	68	78	30	52	48	56	38	33	24			
21	40	24	26	22	40	30	68	44	64	52	86	64	90	65	86	68	74	48	56	50	39	20	21				
22	24	21	15	24	20	20	59	42	60	37	85	59	85	72	82	64	89	56	55	34	26	37	24				
23	40	14	31	16	29	17	65	39	60	50	61	83	65	85	94	68	68	34	60	52	34	30	52	35			
24	43	20	33	10	40	40	53	49	99	68	84	57	84	62	69	38	66	52	40	31	36	28					
25	46	12	36	19	35	63	65	64	47	69	68	60	92	57	61	50	76	50	44	33	44	29					
26	17	4	35	28	39	32	56	43	64	49	78	71	77	53	79	54	59	56	72	58	44	32	36	14			
27	18	23	20	10	40	30	60	40	56	40	80	60	80	60	80	60	80	60	70	40	30	30	30	17			
28	20	8	30	16	56	32	56	36	70	43	96	72	74	56	81	88	82	60	60	34	34	30	39	9			
29	53	18	56	36	62	32	76	46	94	66	75	51	85	53	90	56	40	37	31	20	34	20	34	10			
30	16	6	76	36	68	47	69	52	82	64	72	45	86	55	88	70	44	34	29	20	33	22					
31	11	2	80	43	58	40	63	44	64	58	86	50	82	62	86	50	62	57	27	27	40	43	21				
AV.	24	7	30	16	48	26	64	60	68	48	88	64	83	61	85	61	80	54	68	47	41	31	36	24			
MEAN	28	7.5	22.8	15.9	45.9	25.9	61.9	61.9	68.9	48.9	88.9	64.9	86.9	61.9	85.9	61.9	80.9	54.9	68.9	47.9	41.9	31.9	36.9	24.9			
STA AV.	28	7	30	16	48	26	64	60	68	48	88	64	83	61	85	61	80	54	68	47	41	31	36	24			

NOTES: Temperature data taken from hygrothermograph charts. The recording period is from 0001 to 2400 for the date shown. STA AV based on 7 yr record period.

1971 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.27	0.0	0.0	2	0.0	0.0	0.0	0.0	0.85	0.14	0.0	0.0	0.0	0.0	0.0	
3	0.91	0.0	0.0	0.0	0.0	0.0	0.26	0.64	0.0	0.0	0.0	0.01	3	0.0	0.0	0.0	0.0	1.95	0.26	0.04	0.0	0.0	0.0	0.0	
4	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.05	0.0	0.0	0.05	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.05	0.0	0.22	0.14	0.0	0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	1.59	0.14	0.0	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.04	0.0	7	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.09	0.10	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.09	0.10	
9	0.0	0.0	0.0	0.0	0.33	0.69	0.72	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.33	0.69	0.72	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	3.88	0.16	0.44	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.0	3.88	0.16	0.44	0.0	0.0	0.0	0.0	
11	0.0	0.01	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0	11	0.0	0.01	0.0	0.0	0.02	0.0	0.02	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
16	0.0	0.0	0.0	0.0	0.06	0.03	0.0	0.0	0.0	0.0	0.43	0.0	16	0.0	0.0	0.0	0.0	0.06	0.03	0.0	0.0	0.0	0.43	0.0	
17	0.0	0.0	0.0	0.0	0.07	0.54	0.0	0.03	0.0	0.0	1.10	0.0	17	0.0	0.0	0.0	0.0	0.07	0.54	0.0	0.03	0.0	1.10	0.0	
18	0.0	0.52	0.0	0.0	1.95	0.26	0.04	0.0	0.0	0.54	0.0	0.0	18	0.0	0.52	0.0	0.0	1.95	0.26	0.04	0.0	0.0	0.54	0.0	
19	0.0	0.18	0.0	0.0	0.10	0.0	0.0	0.14	0.0	0.0	0.0	0.0	19	0.0	0.18	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.34	0.0	0.0	0.0	
21	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.25	0.0	0.02	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.25	0.0	0.02	0.0	0.33	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.14	0.0	23	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.14	0.0	
24	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.02	0.10	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.02	0.10	0.0	0.0	
25	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	25	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	
26	0.0	0.02	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.09	0.10	0.0	26	0.0	0.02	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.09	0.10	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.05	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.05	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	
29	0.05	0.0	0.0	0.0	1.54	0.0	0.0	0.06	0.02	0.0	0.61	0.0	29	0.05	0.0	0.0	0.0	1.54	0.0	0.0	0.06	0.02	0.0	0.61	
30	0.0	0.0	0.0	0.11	0.29	0.18	0.0	0.0	0.0	0.92	0.0	0.0	30	0.0	0.0	0.0	0.11	0.29	0.18	0.0	0.0	0.0	0.92	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.96	1.14	0.20	1.06	9.56	3.44	1.53	1.51	0.72	4.80	3.91	0.87	TOTAL	0.96	1.14	0.20	1.06	9.56	3.44	1.53	1.51	0.72	4.80	3.91	0.87
STA AV	0.53	0.61	0.85	3.16	4.63	6.42	3.39	3.20	3.93	3.05	1.15	0.85	STA AV	0.53	0.61	0.85	3.16	4.63	6.42	3.39	3.20	3.93	3.05	1.15	0.85

NOTES: Daily precipitation amounts are arithmetic average values from stations 113 and 114 before April 1 and after November 1; Thiessen weighted average values from rain gages 112, 113 and 114 for remainder of year. STA AV based on 8 yr record period.

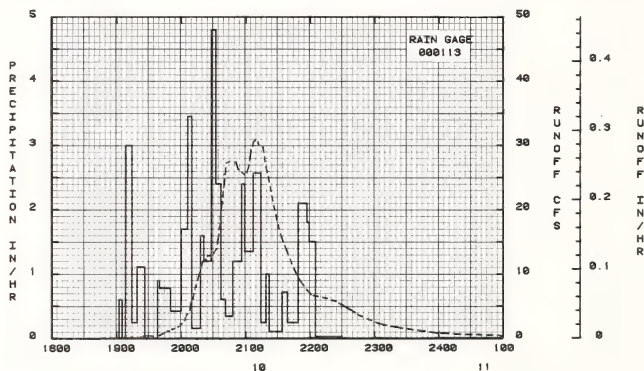
1971 MEAN DAILY DISCHARGE (cfs)													TREYNOR, IOWA WATERSHED 3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.022	0.031	0.058	0.033	0.026	0.079	0.052	0.032	0.024	0.013	0.106	0.027	1	0.022	0.031	0.058	0.033	0.026	0.079	0.052	0.032	0.024	0.013	0.106	0.027
2	0.022	0.027	0.046	0.033	0.025	0.078	0.050	0.030	0.018	0.018	0.030	0.027	2	0.022	0.027	0.046	0.033	0.025	0.078	0.050	0.030	0.018	0.018	0.030	0.027
3	0.022	0.024	0.046	0.033	0.027	0.076	0.054	0.042	0.017	0.016	0.027	0.027	3	0.022	0.024	0.046	0.033	0.027	0.076	0.054	0.042	0.017	0.016	0.027	0.027
4	0.022	0.022	0.201	0.033	0.026	0.074	0.049	0.037	0.017	0.015	0.027	0.027	4	0.022	0.022	0.201	0.033	0.026	0.074	0.049	0.037	0.017	0.015	0.027	0.027
5	0.022	0.022	0.238	0.033	0.030	0.080	0.049	0.030	0.016	0.014	0.027	0.027	5	0.022	0.022	0.238	0.033	0.030	0.080	0.049	0.030	0.016	0.014	0.027	0.027
6	0.022	0.022	0.128	0.030	0.053	0.077	0.048	0.030	0.017	0.013	0.027	0.027	6	0.022	0.022	0.128	0.030	0.053	0.077	0.048	0.030	0.017	0.013	0.027	0.027
7	0.022	0.022	0.060	0.027	0.045	0.076	0.047	0.031	0.015	0.013	0.027	0.027	7	0.022	0.022	0.060	0.027	0.045	0.076	0.047	0.031	0.015	0.013	0.027	0.027
8	0.022	0.019	0.110	0.027	0.036	0.073	0.045	0.039	0.017	0.015	0.027	0.027	8	0.022	0.019	0.110	0.027	0.036	0.073	0.045	0.039	0.017	0.015	0.027	0.027
9	0.022	0.017	0.253	0.027	0.037	0.084	0.058	0.029	0.016	0.016	0.027	0.027	9	0.022	0.017	0.253	0.027	0.037	0.084	0.058	0.029	0.016	0.016	0.027	0.027
10	0.022	0.017	0.539	0.027	1.804	0.081	0.056	0.025	0.015	0.015	0.027	0.027	10	0.022	0.017	0.539	0.027	1.804	0.081	0.056	0.025	0.015	0.015	0.027	0.027
11	0.022	0.168	0.369	0.027	0.171	0.071	0.048	0.025	0.016	0.014	0.027	0.027	11	0.022	0.168	0.369	0.027	0.171	0.071	0.048	0.025	0.016	0.014	0.027	0.027
12	0.022	0.063	0.118	0.027	0.090	0.071	0.047	0.026	0.014	0.016	0.027	0.027	12	0.022	0.063	0.118	0.027	0.090	0.071	0.047	0.026	0.014	0.016	0.027	0.027
13	0.022	0.026	0.084	0.027	0.077	0.069	0.045	0.023	0.016	0.017	0.027	0.027	13	0.022	0.026	0.084	0.027	0.077	0.069	0.045	0.023	0.016	0.017	0.027	0.027
14	0.019	0.022	0.058	0.027	0.073	0.073	0.046	0.025	0.016	0.017	0.027	0.027	14	0.019	0.022	0.058	0.027	0.073	0.073	0.046	0.025	0.016	0.017	0.027	0.027
15	0.017	0.208	0.055	0.027	0.073	0.059	0.042	0.027	0.016	0.017	0.024	0.028	15	0.017	0.208	0.055	0.027	0.073	0.059	0.042	0.027	0.016	0.017	0.024	0.028
16	0.017	0.313	0.053	0.029	0.069	0.069	0.041	0.025	0.016	0.015	0.028	0.027	16	0.017	0.313	0.053	0.029	0.069	0.069	0.041	0.025	0.016	0.015	0.028	0.027
17	0.017	0.275	0.050	0.030	0.082	0.068	0.039	0.023	0.016	0.014	0.052	0.027	17	0.017	0.275	0.050	0.030	0.082	0.068	0.039	0.023	0.016	0.014	0.052	0.027
18	0.017	1.009	0.047	0.028	0.451	0.071	0.040	0.023	0.017	0.024	0.028	0.027	18	0.017	1.009	0.047	0.028	0.451	0.071	0.040	0.023	0.017	0.024	0.028	0.027
19	0.017	0.243	0.051	0.027	0.065	0.071	0.045	0.038	0.027	0.016	0.016	0.027	19	0.017	0.243	0.051	0.027	0.065	0.071	0.045	0.038	0.027	0.016	0.016	0.027
20	0.017	0.055	0.057	0.037	0.059	0.062	0.039	0.029	0.017	0.017	0.027	0.027	20	0.017	0.055	0.057	0.037	0.059	0.062	0.039	0.029	0.017	0.017	0.027	0.027
21	0.020	0.041	0.062	0.027	0.094	0.068	0.036	0.027	0.016	0.017	0.027	0.027	21	0.020	0.041	0.062	0.027	0.094	0.068	0.036	0.027	0.016	0.017	0.027	0.027
22	0.017	0.039	0.058	0.027	0.094	0.071	0.038	0.023	0.017	0.017	0.027	0.027	22	0.017	0.039	0.058	0.027	0.094	0.071	0.038	0.023	0.017	0.017	0.027	0.027
23	0.019	0.039	0.057	0.027	0.092	0.068	0.038	0.023	0.017	0.017	0.028	0.027	23	0.019	0.039	0.057	0.027	0.092	0.068	0.038	0.023	0.017	0.017	0.028	0.027
24	0.019	0.039	0.057	0.027	0.092	0.068	0.038	0.023	0.017	0.017	0.027	0.027	24	0.019	0.039	0.057	0.027	0.092	0.068	0.038	0.023	0.017	0.017	0.027	0.027
25	0.018	0.039	0.043	0.027	0.083	0.062	0.039	0.023	0.020	0.017	0.027	0.027	25	0.018	0.039	0.043	0.027	0.083	0.062	0.039	0.023	0.020	0.017	0.027	0.027
26	0.027	0.060	0.039	0.028	0.079	0.060	0.036	0.023	0.016	0.017	0.029	0.027	26	0.027	0.060	0.039	0.028	0.079	0.060	0.036	0.023	0.016	0.017	0.029	0.027
27	0.027	0.021	0.037	0.028	0.079	0.059	0.036	0.023	0.016	0.028	0.027	0.027	27	0.027	0.021	0.037	0.028	0.079	0.059	0.036	0.023	0.016	0.028	0.027	0.027
28	0.027	0.096	0.034	0.027	0.078	0.054	0.034	0.022	0.016	0.017	0.027	0.027	28	0.027	0.096	0.034	0.027	0.078	0.054	0.034	0.022	0.016	0.017	0.027	0.027
29	0.086	0.034	0.025	0.078	0.084	0.031	0.020	0.017	0.130	0.027	0.163	0.027	29	0.086	0.034	0.025	0.078	0.084	0.031	0.020	0.017	0.130	0.027	0.163	0.027
30	0.085	0.034	0.025	0.078	0.084	0.035	0.026	0.014	0.024	0.027	0.162	0.027	30	0.085	0.034	0.025	0.078	0.084	0.035	0.026	0.014	0.024	0.027	0.162	0.027
31	0.033	0.031	0.031	0.080	0.080	0.031	0.020	0.020	0.024	0.024	0.038	0.038	31	0.033	0.031	0.031	0.080	0.080	0.031	0.020	0.020	0.024	0.024	0.038	0.038
MEAN	0.046	0.133	0.100	0.087	0.106	0.077	0.084	0.065	0.028	0.028	0.036	0.022	MEAN	0.046	0.133	0.100	0.087	0.106	0.077	0.084	0.065	0.028	0.028	0.036	0.022
1 TRENDS	0.171	0.709	0.619	0.192	0.367	0.472	0.294	0.186	0.111	0.152	0.204	0.222	1 TRENDS	0.171	0.709	0.619	0.192	0.367	0.472	0.294	0.186	0.111	0.152	0.204	0.222
STA AV	0.259	0.541	0.525	0.305	0.393	0.760	0.352	0.247	0.271	0.326	0.226	0.219	STA AV	0.259	0.541	0.525	0.305	0.393	0.760	0.352	0.247	0.271	0.326	0.226	0.219

1971 SELECTED RUNOFF EVENT							TREYNOR, IOWA WATERSHED 3				
ANTECEDENT CONDITIONS			Date Mo-Day	RAINFALL			Date Mo-Day	RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)		Time of Day	Intensity (in/hr)	acc. (inches)		Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MAY 10 - 11, 1971											
RG 000113			5-10	RG 000113			5-10	RG 000113			
5-10	0.57	0.014		1902	0.0	0.0		1885	0.047	0.0	
				1905	0.6000	0.03		1907	0.047	0.0002	
				1908	0.0	0.03		1911	0.055	0.0002	
				1914	3.0003	0.33		1912	0.094	0.0002	
			1919	0.2400	0.35	1913	0.117	0.0002			
WATERSHED CONDITIONS:											
96% Permanent brose grass											
pasture, moderately grazed											
in weekly rotation, 8 in.											
tall, 70% canopy; 4% gravel											
roads and farmstead.											
			1926	1.1144	0.48	1914	0.147	0.0002			
			1938	0.0	0.48	1915	0.055	0.0002			
			1940	0.9002	0.51	1921	0.059	0.0003			
			1950	0.7800	0.64	1923	0.252	0.0003			
			2050	0.4200	1.71	1925	0.296	0.0004			
			2006	1.7002	0.88	1927	0.369	0.0005			
			2010	3.4500	1.11	1929	0.395	0.0006			
			2016	0.1500	1.13	1938	0.395	0.0011			
			2021	1.5999	1.21	1941	0.515	0.0013			
			2028	1.2000	1.35	1942	0.673	0.0014			
			2032	4.8001	1.67	1945	0.859	0.0018			
			2037	2.4001	1.67	1947	1.050	0.0021			
			2041	0.6000	1.91	1949	1.175	0.0024			
			2048	0.3429	1.95	1951	1.440	0.0028			
			2056	1.2000	2.11	1954	1.501	0.0035			
			2059	2.3999	2.23	1957	1.700	0.0042			
			2107	1.3500	2.41	1958	1.881	0.0045			
			2114	2.5714	2.71	1959	2.161	0.0048			
			2119	0.2400	2.73	2001	2.251	0.0055			
			2122	1.0002	2.78	2003	2.711	0.0063			
			2134	0.1000	2.80	2004	3.191	0.0068			
			2139	0.7200	2.86	2005	3.522	0.0073			
			2149	0.2400	2.90	2006	3.751	0.0079			
			2157	2.1000	3.18	2008	4.317	0.0092			
			2159	1.6004	3.24	2009	5.572	0.0100			
			2205	1.4999	3.39	2011	6.107	0.0118			
			2230	0.0240	3.40	2012	6.942	0.0128			
						2013	7.812	0.0139			
						2014	8.332	0.0151			
						2016	9.483	0.0179			
						2018	10.484	0.0210			
						2020	11.921	0.0245			
						2023	12.259	0.0301			
						2025	12.822	0.0340			
						2027	12.934	0.0380			
						2030	13.190	0.0441			
						2033	13.955	0.0504			
						2034	14.975	0.0527			
						2035	16.211	0.0551			
						2036	17.805	0.0577			
						2038	21.247	0.0638			
						2040	23.998	0.0708			
						2041	25.798	0.0746			
						2042	27.319	0.0787			
						2045	27.509	0.0914			
						2051	27.319	0.1168			
						2053	26.179	0.1251			
						2056	25.798	0.1371			
						2059	25.418	0.1490			
						2101	25.798	0.1569			
						2103	26.938	0.1650			
						2104	28.079	0.1693			
						2105	29.255	0.1737			
						2107	30.500	0.1829			
						2109	30.915	0.1924			
						2111	30.500	0.2019			
						2112	30.085	0.2066			
						2116	29.670	0.2251			
						2119	26.559	0.2381			
						2121	25.038	0.2460			
						2126	20.612	0.2636			
						2129	18.386	0.2726			
						2133	15.775	0.2832			
						2138	13.659	0.2946			
						2143	11.584	0.3044			
						2146	10.484	0.3095			
						2151	8.883	0.3170			
						2154	8.158	0.3210			
						2157	7.467	0.3246			
						2201	6.792	0.3290			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.009269. Event precipitation totals for rain gage 112 and 114 are 3.23 and 3.34 in., respectively, and the Thiessen weighted average event precipitation is 3.33 in.

1971 SELECTED RUNOFF EVENT					TREYBOS, IOWA WATERSHED 3				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 10 - 11, 1971 (CONTINUED)									
						5-10	2203	6.642	0.3311
							2213	6.257	0.3411
							2216	6.182	0.3440
							2221	5.877	0.3487
							2224	5.721	0.3514
							2227	5.422	0.3540
							2229	5.171	0.3566
							2230	5.112	0.3564
							2233	4.807	0.3587
							2234	4.744	0.3594
							2237	4.442	0.3615
							2238	4.379	0.3622
							2242	3.971	0.3648
							2244	3.694	0.3660
							2246	3.522	0.3671
							2247	3.412	0.3676
							2249	3.301	0.3686
							2254	2.501	0.3710
							2257	2.711	0.3723
							2304	2.251	0.3750
							2311	1.960	0.3773
							2318	1.771	0.3793
							2326	1.501	0.3813
							2336	1.290	0.3835
							2343	1.100	0.3848
							2347	1.050	0.3855
							2354	0.859	0.3865
							2400	0.732	0.3872
						5-11	2	0.732	0.3874
							9	0.693	0.3882
							16	0.617	0.3889
							31	0.515	0.3902
							46	0.452	0.3913
							55	0.424	0.3919
							130	0.274	0.3938
							200	0.233	0.3950
							315	0.214	0.3976

NOTES: To convert runoff in CFS to I8/HR, multiply by 0.009269. Event precipitation totals for rain gage 112 and 114 are 3.23 and 3.38 in., respectively, and the Thiessen weighted average event precipitation is 3.33 in.



EVENT OF MAY 10 - 11, 1971

TREYNOR, IOWA WATERSHED 3

## TREYNOR, IOWA WATERSHED 4

LOCATION: Pottawattamie County, Iowa; approximately 3 miles southwest of Treynor; Silver Creek, West Nishnabota River, Missouri River Basin.

AREA: 150.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)												TREYNOR, IOWA WATERSHED 4											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Annual											
1971 P	0.88	1.07	0.20	1.10	9.57	3.46	1.60	1.70	0.83	4.83	3.86	0.91	30.01										
Q	0.246	0.326	0.529	0.413	1.647	0.805	0.545	0.505	0.310	0.270	0.274	0.316	6.186										
STA AV P	0.51	0.60	0.84	3.17	4.60	6.50	3.41	3.23	4.26	3.17	1.16	0.82	32.27										
Q	0.390	0.413	0.603	0.468	0.678	1.017	0.799	0.547	0.524	0.510	0.459	0.427	6.633										
ANNUAL MAXIMUM DISCHARGE (in/hr) and MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge				Maximum Volume for Selected Time Interval																			
Date	Date	1 Hour	2 Hours	Date	Date	6 Hours	12 Hours	Date	Date	1 Day	2 Days	Date	Date	8 Days		Date	Date	Vol.	Vol.	Date	Date	Vol.	Vol.
1971	5-10	0.241	5-10	0.168	5-10	0.289	5-10	0.425	5-10	0.440	5-10	0.463	5-10	0.509	5-10	0.789							
	6-25	0.296	5-10	0.168	5-10	0.289	5-10	0.425	2-28	0.496	2-28	0.645	2-28	0.758	6-20	1.072							
	1966								1965														

## MAXIMUMS FOR PERIOD OF RECORD

NOTES: Watershed conditions: 82% contoured corn above level terraces which have a capacity of 2 inches of runoff; 7% contoured corn below the bottom terraces; 10% grassed terrace backslopes; 1% gully. Precipitation from rain gage 113 before April 1 and after November 1; Thiessen average of gages 111, 112 and 113 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 27, 1964. January 1 to February 27, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71-003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1194, p. 71.4-6. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1971 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 4												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.35	0.0	1.64	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.23	0.0	0.0													
3	0.83	0.0	0.0	0.0	0.0	0.0	0.25	0.74	0.0	0.0	0.0	0.01													
4	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.32	0.05	0.0	0.0	0.05													
5	0.0	0.0	0.06	0.0	0.0	0.28	0.16	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	1.54	0.12	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.04	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.08	0.12													
9	0.0	0.0	0.0	0.0	0.0	0.33	0.70	0.82	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	3.84	0.13	0.43	0.0	0.0	0.0	0.0													
11	0.0	0.02	0.0	0.0	0.0	0.04	0.0	0.01	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05													
16	0.0	0.0	0.0	0.07	0.03	0.0	0.0	0.0	0.0	0.0	0.35	0.0													
17	0.0	0.0	0.0	0.05	0.58	0.0	0.02	0.0	0.0	0.0	1.16	0.0													
18	0.0	0.47	0.0	0.0	1.93	0.25	0.05	0.0	0.0	0.55	0.0	0.0													
19	0.0	0.17	0.0	0.0	0.12	0.0	0.0	0.17	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.22	0.02	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.13	0.0													
24	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.02	0.10	0.0	0.0	0.0													
25	0.0	0.0	0.09	0.0	0.0	0.0	0.02	0.0	0.27	0.0	0.0	0.0													
26	0.0	0.02	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.10	0.10	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.85	0.0	0.05													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0													
29	0.05	0.0	0.0	0.0	0.56	0.0	0.06	2.06	0.0	0.63	0.0	0.0													
30	0.0	0.0	0.12	0.31	0.22	0.0	0.0	0.0	0.96	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.88	1.07	0.20	1.10	9.57	3.46	1.60	1.70	0.83	4.83	3.86	0.91													
STA AV	0.51	0.60	0.84	3.17	4.60	6.50	3.41	3.23	4.26	3.17	1.16	0.82													

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 111, 112 and 113 for period of April 1 through November 1, and from 113 for remainder of year. STA AV based on 8 yr record period.

1971				TREYNOR, IOWA WATERSHED #								
MEAN DAILY DISCHARGE (cfs)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.069	0.039	0.073	0.094	0.081	0.233	0.116	0.107	0.050	0.054	0.090	0.064
2	0.068	0.039	0.074	0.094	0.077	0.233	0.116	0.111	0.078	0.056	0.065	0.064
3	0.064	0.039	0.074	0.094	0.081	0.218	0.119	0.124	0.073	0.054	0.056	0.064
4	0.059	0.039	0.082	0.094	0.083	0.215	0.114	0.117	0.073	0.054	0.054	0.064
5	0.054	0.039	0.101	0.094	0.087	0.218	0.114	0.115	0.073	0.050	0.054	0.064
6	0.054	0.039	0.101	0.094	0.220	0.216	0.109	0.110	0.073	0.050	0.054	0.064
7	0.054	0.039	0.094	0.094	0.149	0.215	0.109	0.110	0.073	0.054	0.054	0.064
8	0.050	0.036	0.094	0.094	0.097	0.215	0.106	0.108	0.073	0.054	0.055	0.064
9	0.047	0.033	0.112	0.091	0.105	0.208	0.123	0.107	0.073	0.054	0.054	0.064
10	0.047	0.033	0.187	0.085	2.797	0.183	0.118	0.104	0.073	0.054	0.054	0.064
11	0.047	0.043	0.192	0.086	0.368	0.170	0.106	0.104	0.073	0.054	0.054	0.064
12	0.047	0.052	0.136	0.083	0.295	0.163	0.105	0.104	0.073	0.054	0.054	0.064
13	0.047	0.043	0.127	0.083	0.295	0.163	0.106	0.104	0.068	0.054	0.054	0.064
14	0.047	0.039	0.124	0.083	0.283	0.163	0.112	0.104	0.064	0.050	0.054	0.064
15	0.047	0.078	0.113	0.083	0.260	0.156	0.107	0.104	0.064	0.054	0.054	0.064
16	0.047	0.124	0.110	0.083	0.250	0.155	0.107	0.104	0.064	0.054	0.058	0.064
17	0.047	0.125	0.110	0.083	0.249	0.151	0.108	0.100	0.064	0.054	0.075	0.064
18	0.047	0.311	0.110	0.083	0.508	0.163	0.108	0.104	0.064	0.056	0.063	0.064
19	0.047	0.232	0.108	0.083	0.472	0.146	0.105	0.110	0.064	0.050	0.056	0.064
20	0.047	0.076	0.104	0.093	0.414	0.143	0.111	0.107	0.059	0.049	0.054	0.064
21	0.054	0.068	0.104	0.083	0.381	0.144	0.110	0.099	0.054	0.054	0.054	0.064
22	0.051	0.064	0.104	0.083	0.355	0.147	0.111	0.094	0.054	0.054	0.054	0.064
23	0.045	0.064	0.104	0.083	0.342	0.139	0.112	0.094	0.054	0.054	0.054	0.064
24	0.053	0.064	0.104	0.083	0.312	0.137	0.115	0.094	0.054	0.054	0.054	0.064
25	0.053	0.071	0.104	0.083	0.291	0.137	0.105	0.094	0.061	0.054	0.054	0.064
26	0.047	0.079	0.104	0.083	0.279	0.127	0.104	0.094	0.054	0.049	0.054	0.064
27	0.043	0.073	0.102	0.083	0.268	0.123	0.107	0.094	0.054	0.056	0.054	0.064
28	0.039	0.073	0.097	0.083	0.256	0.120	0.113	0.094	0.054	0.047	0.054	0.064
29	0.045	0.094	0.083	0.083	0.246	0.144	0.116	0.094	0.055	0.081	0.059	0.064
30	0.048	0.094	0.082	0.083	0.245	0.138	0.114	0.088	0.052	0.075	0.064	0.064
31	0.039	0.094	0.083	0.083	0.234	0.130	0.110	0.083	0.054	0.054	0.054	0.064
MEAN	0.0501	0.0734	0.1075	0.0867	0.3349	0.1691	0.1109	0.1026	0.0652	0.0548	0.0575	0.0643
INCHES	0.246	0.326	0.529	0.413	1.647	0.805	0.545	0.535	0.310	0.270	0.274	0.316
STA AV	0.350	0.413	0.603	0.468	0.678	1.017	0.799	0.547	0.524	0.510	0.459	0.427

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.15868. STA AV based on 8 yr record period.

1971 SELECTED RUNOFF EVENT TREYNOR, IOWA WATERSHED #											
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 10 - 11, 1971											
RG 000113			RG 000113								
5-10	0.57	0.030	5-10	1902	0.0	0.0	5-10	1911	0.104	0.0	
				1905	0.6000	0.03		1912	0.147	0.0	
				1908	0.0	0.03		1913	0.197	0.0	
				1914	3.0003	0.33		1915	0.233	0.0	
				1919	0.2400	0.35		1918	0.233	0.0001	
WATERSHED CONDITIONS:											
				1926	1.1144	0.48		1919	0.215	0.0001	
				1938	0.0	0.48		1925	0.215	0.0002	
				1940	0.9002	0.51		1927	0.233	0.0002	
				1950	0.7800	0.64		1928	0.452	0.0002	
				2000	0.4200	0.71		1929	1.101	0.0003	
				2006	1.7002	0.88		1930	1.841	0.0005	
				2010	3.4500	1.11		1931	2.208	0.0007	
				2018	0.1500	1.13		1932	2.626	0.0010	
				2021	1.5999	1.21		1933	2.901	0.0013	
				2028	1.2000	1.35		1934	3.206	0.0016	
				2032	4.8001	1.67		1935	3.828	0.0020	
				2037	2.4001	1.87		1936	4.642	0.0025	
				2041	0.6000	1.91		1937	5.466	0.0031	
				2048	0.3429	1.95		1938	5.820	0.0037	
				2056	1.2000	2.11		1941	5.820	0.0056	
				2059	2.3999	2.23		1943	5.602	0.0069	
				2107	1.3500	2.41		1945	5.192	0.0081	
				2114	2.5714	2.71		1948	4.571	0.0097	
				2119	0.2400	2.73		1951	4.117	0.0111	
				2122	1.0002	2.78		1953	3.771	0.0120	
				2134	0.1000	2.80		1955	3.662	0.0128	
				2139	0.7200	2.86		1957	3.662	0.0136	
				2149	0.2400	2.90		1958	4.001	0.0140	
				2157	2.1000	3.18		1959	4.642	0.0145	
				2159	1.8004	3.24		2000	5.192	0.0150	

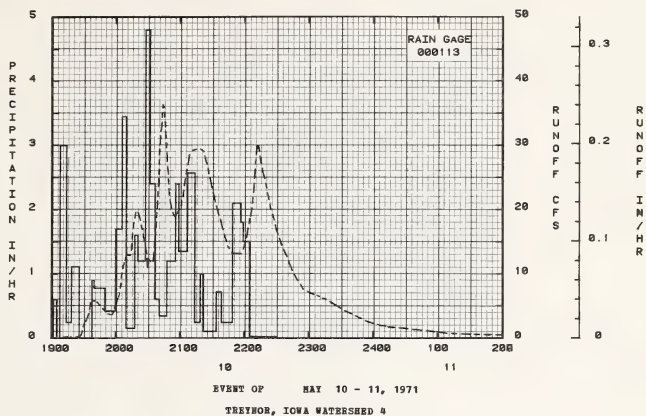
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00646. Total precipitation for rain gages 111 and 112 are 3.16 and 3.23 in., respectively and the Thompson event precipitation is 3.25 in.

1971 SELECTED RUNOFF EVENT						TRENTON, IOWA WATERSHED #				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 10 - 11, 1971 (CONTINUED)										
5-10			2205		1.4999	3.39	5-10	2001	5.602	0.0156
			2230		0.0240	3.40		2002	6.182	0.0162
								2003	6.399	0.0169
								2004	7.053	0.0176
								2005	8.583	0.0185
								2006	10.153	0.0195
								2007	10.994	0.0207
								2008	11.714	0.0220
								2009	12.194	0.0233
								2010	12.675	0.0247
								2011	12.914	0.0261
								2014	12.914	0.0304
								2015	13.935	0.0319
								2016	16.326	0.0336
								2017	18.037	0.0355
								2018	18.936	0.0375
								2019	19.596	0.0396
								2021	19.596	0.0439
								2023	18.321	0.0481
								2024	17.466	0.0501
								2025	16.896	0.0520
								2026	15.756	0.0538
								2028	14.195	0.0571
								2029	13.154	0.0586
								2030	10.994	0.0599
								2031	12.194	0.0612
								2033	11.953	0.0639
								2035	11.953	0.0665
								2036	13.414	0.0679
								2037	15.756	0.0695
								2038	18.037	0.0714
								2039	20.587	0.0735
								2040	24.068	0.0760
								2041	29.409	0.0789
								2042	31.525	0.0823
								2043	33.641	0.0859
								2044	36.392	0.0897
								2045	35.932	0.0937
								2046	33.641	0.0975
								2047	31.100	0.1011
								2048	27.459	0.1043
								2049	25.508	0.1072
								2050	22.267	0.1098
								2052	20.257	0.1145
								2054	19.266	0.1189
								2055	18.936	0.1210
								2057	19.266	0.1252
								2059	19.927	0.1295
								2101	20.587	0.1340
								2103	22.267	0.1387
								2105	24.788	0.1439
								2108	27.655	0.1526
								2109	28.630	0.1557
								2112	29.214	0.1653
								2115	29.409	0.1750
								2119	29.409	0.1880
								2122	29.019	0.1976
								2123	28.240	0.2008
								2125	27.069	0.2069
								2128	24.788	0.2155
								2130	23.347	0.2208
								2133	21.248	0.2281
								2135	19.927	0.2327
								2138	18.321	0.2390
								2140	16.896	0.2429
								2142	15.756	0.2465
								2145	14.195	0.2515
								2146	13.935	0.2530
								2149	13.154	0.2575
								2157	13.154	0.2691
								2200	14.195	0.2736
								2203	16.326	0.2786
								2205	18.607	0.2825
								2206	18.936	0.2846
								2207	20.257	0.2868

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00661. Event precipitation totals for rain gages 111 and 112 are 3.16 and 3.23 in., respectively and the Thiessen average event precipitation is 3.25 in.

1971 SELECTED RUNOFF EVENT					TREYNOR, IOWA WATERSEED #				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)
EVENT OF MAY 10 - 11, 1971 (CONTINUED)									
5-10							2208	21.907	0.2891
							2209	23.347	0.2916
							2210	26.289	0.2943
							2211	28.630	0.2973
							2212	29.836	0.3006
							2213	29.836	0.3039
							2214	29.019	0.3071
							2215	27.850	0.3103
							2217	25.899	0.3162
							2219	24.788	0.3218
							2220	24.068	0.3245
							2222	22.267	0.3296
							2225	19.927	0.3366
							2228	18.321	0.3429
							2230	16.896	0.3468
							2235	14.455	0.3554
							2237	13.675	0.3585
							2240	12.675	0.3629
							2242	11.714	0.3656
							2245	10.554	0.3693
							2248	9.553	0.3726
							2250	8.952	0.3746
							2253	8.243	0.3774
							2255	7.563	0.3791
							2303	6.908	0.3855
							2305	6.762	0.3870
							2308	6.617	0.3892
							2310	6.472	0.3906
							2313	6.182	0.3927
							2316	6.036	0.3947
							2323	5.332	0.3991
							2330	4.642	0.4029
							2335	4.117	0.4053
							2340	3.771	0.4075
							2344	3.436	0.4091
							2349	2.996	0.4109
							2355	2.530	0.4127
							2400	2.255	0.4140
5-11							7	1.921	0.4156
							12	1.841	0.4166
							14	1.735	0.4170
							20	1.630	0.4181
							28	1.500	0.4195
							41	1.260	0.4215
							53	1.050	0.4230
							109	0.731	0.4246
							130	0.581	0.4261
							150	0.514	0.4273
							210	0.452	0.4284
							223	0.452	0.4290
							233	0.423	0.4295
							255	0.395	0.4305

NOTES: To convert runoff in cfs to in/hr, multiply by 0.00661. Event precipitation totals for rain gages 111 and 112 are 3.16 and 3.23 in., respectively and the Thiessen average event precipitation is 3.25 in.



## TREYNOR, IOWA WATERSHED 5

LOCATION: Pottawattamie County, Iowa; approximately 9 miles southeast of Treynor and 3 miles southwest of Macedonia; West Mishnabotna River, Missouri River Basin.

AREA: 389.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TREYNOR, IOWA WATERSHED 5																				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																				
1971 P	0.75	1.50	0.34	1.11	6.45	2.97	1.92	0.75	0.57	5.06	4.09	1.09	26.60																				
Q	0.144	0.699	0.561	0.328	0.880	0.470	0.340	0.190	0.094	0.147	0.211	0.158	4.221																				
STA AV P	0.50	0.64	1.10	3.06	3.62	6.07	3.19	3.30	3.86	2.76	1.27	0.91	30.28																				
Q	0.254	0.396	0.571	0.338	0.396	1.013	0.502	0.308	0.398	0.298	0.271	0.246	4.992																				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																	
Maximum Discharge													Maximum Volume for Selected Time Interval																				
Date		Date		1 Hour Date Vol.		2 Hours Date Vol.		6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.																	
1971		5-18		0.149		5-18		0.099		5-18		0.137		5-18		0.173		5-18		0.190		2-18		0.276		2-17		0.399		2-16		0.525	
MAXIMUMS FOR PERIOD OF RECORD																																	
6-20		1.250		6-20		0.890		6-20		1.271		6-20		1.529		6-20		1.575		6-20		1.636		6-20		1.744		6-20		2.460			
1967		1967		1967		1967		1967		1967		1967		1967		1967		1967		1967		1967		1967		1967		1967					

NOTES: Watershed conditions: Percent crop distribution of area above or below level terraces, respectively is: corn, 30 and 3; beans, 23 and 1; small grain, 9 and 2; hay and clover, 8 and 0; pasture, 12 and 8; and roads and farmsteads, 1 and 3. Precipitation: Before April 1 and after November 2 arithmetic average of rain gages 101 and 108; thieness average of seven recording rain gages for remainder of year. Precipitation and runoff records began February 6, 1963. January 1 to February 6, 1963 precipitation and runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71-003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71-5-6. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1971 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57	0.0													
2	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.13	0.0	0.0													
3	0.62	0.0	0.0	0.0	0.0	0.0	0.33	0.10	0.0	0.0	0.0	0.0													
4	0.0	0.07	0.0	0.0	0.0	0.0	0.17	0.08	0.0	0.0	0.0	0.09													
5	0.0	0.0	0.04	0.0	0.12	0.07	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.78	0.36	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.05	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.09													
9	0.0	0.0	0.0	0.0	0.18	0.29	0.86	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	1.39	0.05	0.45	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0													
14	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05													
16	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0													
17	0.0	0.0	0.0	0.03	0.55	0.0	0.02	0.0	0.0	0.0	1.09	0.0													
18	0.0	0.87	0.0	0.0	2.23	0.37	0.03	0.0	0.0	0.80	0.0	0.0													
19	0.0	0.18	0.0	0.0	0.07	0.0	0.0	0.19	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.15	0.0	0.19	0.0	0.0													
21	0.0	0.05	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
22	0.0	0.29	0.02	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.18	0.0													
24	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.06	0.12	0.0	0.0	0.0													
25	0.0	0.0	0.10	0.0	0.0	0.0	0.08	0.0	0.29	0.0	0.0	0.0													
26	0.0	0.04	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.09	0.13	0.0													
27	0.0	0.0	0.0	0.18	0.0	0.0	0.15	0.0	0.0	0.94	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.05	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	1.88	0.0	0.82													
30	0.0	0.0	0.0	0.12	0.28	0.27	0.0	0.0	0.0	0.92	0.0	0.02													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.75	1.50	0.34	1.11	6.45	2.97	1.92	0.75	0.57	5.06	4.09	1.09													
STA AV	0.50	0.64	1.10	3.06	3.62	6.07	3.19	3.30	3.86	2.76	1.27	0.91													

NOTES: Daily precipitation amounts are Thiessen weighted average values from seven stations (101 through 107) for period of April 1 through November 2 and are arithmetic averages from stations 101 and 108 for remainder of the year. STA AV based on 9 yr record period.

TREYNOR, IOWA WATERSHED 5											
1971 MEAN DAILY DISCHARGE (cfs)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.094	0.088	0.258	0.181	0.238	0.333	0.192	0.130	0.066	0.039	0.626
2	0.098	0.035	0.271	0.172	0.231	0.340	0.178	0.140	0.053	0.046	0.157
3	0.095	0.043	0.264	0.175	0.212	0.319	0.240	0.159	0.053	0.035	0.029
4	0.064	0.057	0.446	0.169	0.211	0.315	0.200	0.181	0.059	0.035	0.086
5	0.030	0.059	0.448	0.168	0.220	0.312	0.200	0.150	0.049	0.038	0.075
6	0.022	0.059	0.335	0.178	0.403	0.332	0.206	0.139	0.049	0.036	0.071
7	0.033	0.059	0.296	0.173	0.413	0.262	0.176	0.148	0.047	0.034	0.071
8	0.041	0.059	0.312	0.165	0.181	0.264	0.160	0.139	0.050	0.039	0.081
9	0.047	0.059	0.322	0.158	0.172	0.267	0.175	0.122	0.051	0.035	0.079
10	0.046	0.059	0.437	0.147	1.060	0.309	0.327	0.102	0.059	0.035	0.074
11	0.053	0.136	0.464	0.156	0.397	0.252	0.189	0.089	0.059	0.035	0.073
12	0.055	0.075	0.419	0.165	0.277	0.242	0.178	0.100	0.059	0.035	0.071
13	0.047	0.059	0.483	0.157	0.253	0.228	0.171	0.090	0.039	0.035	0.071
14	0.058	0.059	0.403	0.160	0.225	0.246	0.187	0.086	0.034	0.035	0.065
15	0.059	0.125	0.313	0.158	0.211	0.231	0.162	0.086	0.036	0.035	0.065
16	0.059	0.234	0.269	0.193	0.199	0.210	0.154	0.092	0.039	0.035	0.161
17	0.056	0.487	0.267	0.183	0.240	0.201	0.151	0.083	0.037	0.035	0.175
18	0.053	0.406	0.275	0.186	0.674	0.270	0.154	0.082	0.043	0.121	0.108
19	0.050	2.098	0.275	0.195	0.637	0.203	0.153	0.102	0.045	0.052	0.087
20	0.047	0.346	0.251	0.250	0.506	0.182	0.151	0.097	0.056	0.052	0.086
21	0.067	0.277	0.228	0.174	0.492	0.202	0.140	0.091	0.053	0.049	0.086
22	0.083	0.282	0.216	0.157	0.466	0.157	0.159	0.078	0.055	0.047	0.086
23	0.078	0.365	0.216	0.157	0.461	0.157	0.164	0.073	0.059	0.047	0.105
24	0.101	0.281	0.216	0.158	0.485	0.192	0.163	0.069	0.059	0.047	0.104
25	0.152	0.276	0.216	0.158	0.393	0.195	0.160	0.067	0.070	0.047	0.086
26	0.115	0.476	0.237	0.174	0.374	0.180	0.156	0.067	0.059	0.049	0.103
27	0.122	0.516	0.240	0.197	0.363	0.160	0.147	0.072	0.054	0.177	0.086
28	0.122	0.391	0.201	0.210	0.352	0.167	0.143	0.067	0.047	0.071	0.094
29	0.183	0.194	0.233	0.338	0.338	0.332	0.144	0.065	0.051	0.530	0.100
30	0.148	0.198	0.247	0.351	0.534	0.140	0.069	0.040	0.415	0.086	0.211
31	0.080	0.193		0.392		0.133	0.067		0.082		0.151
MEAN	0.0761	0.4078	0.2955	0.1785	0.4641	0.2562	0.1751	0.1001	0.0511	0.0775	0.1149
INCHES	0.144	0.699	0.561	0.328	0.880	0.470	0.340	0.190	0.094	0.147	0.211
STA AV	0.254	0.396	0.571	0.338	0.396	1.013	0.502	0.308	0.398	0.298	0.271

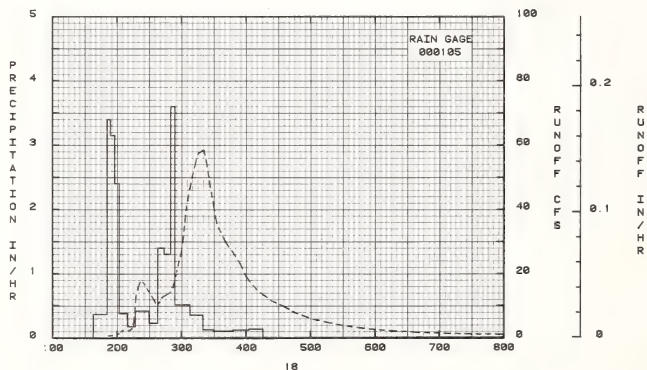
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.06119. STA AV based on 9 yr record period.

TREYNOR, IOWA WATERSHED 5											
1971 SELECTED RUNOFF EVENT											
ANTECEDENT CONDITIONS				RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 18, 1971											
RG 000105											
5-18	0.0	0.005	5-18	138	0.0	0.0	5-18	152	0.588	0.0	
				151	0.3692	0.63		156	0.702	0.0001	
				154	3.4000	0.25		200	0.973	0.0002	
				158	3.1500	0.46		202	1.310	0.0003	
				202	2.4000	0.62		204	1.949	0.0004	
WATERSHED CONDITIONS:											
Percent of Watershed In:											
Above Below											
Terraces Terraces											
Corn	30	3		210	0.3750	0.67		206	2.306	0.0006	
Beans	23	1		217	0.1714	0.69		212	2.255	0.0012	
Small Grain	9	2		230	0.4154	0.78		214	2.852	0.0014	
Alfalfa and				238	0.2250	0.81		216	4.985	0.0017	
Clover	8	0		244	1.4000	0.95		218	13.454	0.0025	
Pasture	12	8		250	1.3000	1.08		220	16.184	0.0038	
Roads and				254	3.6000	1.32		222	17.357	0.0052	
Farmland	1	3		308	0.5163	1.44		224	17.357	0.0067	
Crops heights and canopy:				320	0.3500	1.51		226	16.576	0.0081	
Corn 1-4 in. tall, soybeans				330	0.1200	1.53		228	15.403	0.0095	
1-2 in. tall, small grain 18-				388	0.1000	1.56		230	14.234	0.0108	
24 in. tall, 90% canopy,				403	0.1200	1.59		234	12.144	0.0130	
pasture, 8-12 in. tall, 70-				416	0.1385	1.62		236	10.834	0.0140	
80% canopy.								238	10.508	0.0149	
								240	11.159	0.0158	
								243	12.795	0.0173	
								250	14.234	0.0213	
								252	15.796	0.0226	
								254	17.812	0.0240	
								256	20.977	0.0256	
								258	23.958	0.0275	
								300	26.547	0.0297	
								302	31.752	0.0322	
								304	38.161	0.0352	
								306	43.115	0.0386	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.002549. Event precipitation totals for rain gauges 101, 102, 103, 104, 106 and 107 are 1.41, 1.60, 1.62, 1.47, 1.77, 1.72 inches, respectively and the Thiessen weighted average event precipitation is 1.62 in.

1971 SELECTED RUNOFF EVENT			TETTER, IOWA WATERSHED 5								
AFFECTED CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MAY 18, 1971 (CONTINUED)											
							5-18	308	46.755	0.0424	
								310	49.987	0.0465	
								314	55.730	0.0555	
								316	57.518	0.0603	
								320	58.409	0.0701	
								321	58.409	0.0726	
								324	53.219	0.0797	
								327	46.755	0.0861	
								330	40.934	0.0917	
								333	35.541	0.0966	
								340	30.579	0.1064	
								344	28.237	0.1114	
								348	26.547	0.1161	
								353	23.958	0.1215	
								357	21.432	0.1258	
								400	19.165	0.1280	
								404	17.357	0.1311	
								410	15.015	0.1352	
								416	13.454	0.1388	
								424	11.485	0.1430	
								436	9.614	0.1484	
								444	7.951	0.1514	
								454	6.731	0.1545	
								504	5.621	0.1571	
								520	4.421	0.1605	
								530	3.750	0.1622	
								546	3.001	0.1645	
								600	2.475	0.1661	
								620	1.949	0.1680	
								642	1.549	0.1696	
								706	1.310	0.1711	
								730	1.071	0.1723	
								756	0.973	0.1734	
								816	0.910	0.1742	
								836	0.879	0.1750	
								856	0.820	0.1757	
								930	0.788	0.1769	

NOTES: To convert runoff in CFS to IBS/HR, multiply by 0.002549. Best precipitation totals for rain gauges 101, 102, 103, 104, 106 and 107 are 1.41, 1.60, 1.62, 1.47, 1.77, 1.72 inches, respectively and the Thiessen weighted average event precipitation is 1.62 in.



EVENT OF MAY 18, 1971  
TETTER, IOWA WATERSHED 5

## COTTONWOOD, SOUTH DAKOTA WATERSHED H-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.13 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COTTONWOOD, SOUTH DAKOTA WATERSHED H-2													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1971 P	0.61	1.10	0.24	3.63	3.60	1.37	0.54	1.71	2.87	1.81	0.76	0.16	18.40														
Q	0.0	0.256	0.434	0.004	0.156	0.0	0.0	0.0	0.0	0.082	0.0	0.0	0.932														
STA AV P	0.31	0.37	0.57	2.11	2.68	3.41	1.65	1.31	1.49	0.64	0.32	0.38	15.23														
Q	0.060	0.028	0.301	0.015	0.166	0.313	0.047	0.012	0.012	0.009	0.0	0.0	0.962														
ANNUAL MAXIMUM DISCHARGE (1d/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
Maximum Discharge												Maximum Volume for Selected Time Interval															
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 days	8 Days																			
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date			
1971	10-17	0.244	10-17	0.081	3-10	0.118	3-10	0.229	3-10	0.246	3-10	0.329	3-10	0.363	3-5	0.434											
MAXIMUMS FOR PERIOD OF RECORD																											
5-30	3.577	5-30	0.608	5-30	0.629	5-30	1.129	5-30	1.129	5-30	1.129	3-17	1.462	3-11	1.571												
1963		1963		1963		1963		1963		1963		1963		1969		1969											

NOTES: Watershed conditions: 100% heavily grazed rangeland. Vegetative cover in late July was 1665 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72, 1-5. For temperature information, see table of maximum and minimum values included for Watershed 72.005. Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 9 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1971 DAILY PRECIPITATION (inches)												COTTONWOOD, SOUTH DAKOTA WATERSHED H-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0											
3	0.0	0.175	0.0	0.04	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	2.16	0.0	0.0	0.0											
5	0.0	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.15	0.07	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0											
9	0.015	0.0	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.015	0.055	0.0	0.0	0.57	0.09	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.045	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.045											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.275	0.0											
16	0.0	0.0	0.0	0.0	0.14	0.15	0.0	0.0	0.0	0.14	0.085	0.0											
17	0.175	0.0	0.105	0.23	0.0	0.0	0.09	0.0	0.0	1.10	0.0	0.0											
18	0.0	0.275	0.0	0.07	0.0	0.0	0.0	0.14	0.06	0.10	0.0	0.0											
19	0.0	0.0	0.0	1.94	0.0	0.0	0.0	0.0	0.0	0.0	0.025	0.0											
20	0.135	0.025	0.0	0.58	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0											
21	0.0	0.015	0.025	0.10	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.035	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	1.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.04	0.0	0.34	0.24	0.0	0.0	0.0	0.125	0.0											
26	0.0	0.565	0.065	0.52	0.0	0.11	0.0	0.0	0.0	0.0	0.045	0.0											
27	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.115	0.0											
28	0.0	0.0	0.035	0.0	0.0	3.0	0.0	0.0	0.18	0.065	0.025	0.0											
29	0.055	0.0	0.05	0.50	0.11	0.0	0.0	0.0	0.0	0.025	0.015	0.0											
30	0.115	0.0	0.0	0.70	0.0	0.0	0.0	1.35	0.0	0.0	0.035	0.0											
31	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.61	1.10	0.24	3.63	3.60	1.37	0.54	1.71	2.87	1.81	0.76	0.16											
STA AV	0.31	0.37	0.57	2.11	2.68	3.41	1.65	1.31	1.49	0.64	0.32	0.38											

NOTES: Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. STA AV based on 9 yr (1963-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) COTTONWOOD, SOUTH DAKOTA WATERSEED R-2											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.011	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.001	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0008	0.0013	0.0	0.0005	0.0	0.0	0.0	0.0	0.0002	0.0
INCHES	0.0	0.256	0.434	0.004	0.156	0.0	0.0	0.0	0.0	0.082	0.0
STA AV	0.060	0.028	0.301	0.015	0.166	0.313	0.047	0.012	0.012	0.007	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 11.1745. STA AV based on 9 yr (1963-71) record period.

## COTTONWOOD, SOUTH DAKOTA WATERSHED L-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.38 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COTTONWOOD, SOUTH DAKOTA WATERSHED L-2												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971	P	0.51	0.55	0.15	3.77	3.52	1.31	0.55	1.58	2.82	1.83	0.65	0.12	17.32											
	Q	0.040	0.525	0.232	0.0	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.967											
STA AV	P	0.29	0.29	0.51	2.13	2.67	3.39	1.63	1.32	1.89	0.64	0.30	0.31	14.96											
	Q	0.008	0.058	0.107	0.004	0.049	0.219	0.004	0.9	0.0	0.0	0.0	0.0	0.888											
ANNUAL MAXIMUM DISCHARGES (10/yr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
	Maximum Discharge Date	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date																	
1971	5-30	0.072	2-11	0.062	2-11	0.119	2-11	0.247	2-11	0.274	2-11	0.275	2-11	0.343	2-6	0.525									
MAXIMUMS FOR PERIOD OF RECORD																									
	6-15 1963	0.542	6-15 1963	0.388	6-15 1963	0.540	6-15 1963	1.073	6-15 1963	1.164	6-15 1963	1.243	6-15 1963	1.243	3-8 1966	1.544									

NOTES: Watershed conditions: 100% lightly grazed rangeland. Vegetative cover in late July was 3034 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.2-4. For temperature information, see table of maximum and minimum values included for watershed 72.005. Arithmetic mean of rain gages RL-1, RL-2, RL-3 and RL-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 9 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1971 DAILY PRECIPITATION (inches)													COTTONWOOD, SOUTH DAKOTA WATERSHED L-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0													
3	0.0	0.145	0.0	0.045	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	2.11	0.0	0.0													
5	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.05	0.0	0.0	0.0	0.0	0.045												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.10	0.0	0.085												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0												
9	0.015	0.0	0.0	0.0	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.025	0.075	0.0	0.0	0.51	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0												
12	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
14	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.035	0.0												
15	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.075	0.0												
16	0.145	0.0	0.0	0.0	0.0	0.13	0.15	0.0	0.0	0.0	0.12	0.225	0.0												
17	0.0	0.0	0.055	0.22	0.0	0.0	0.0	0.08	0.0	0.0	1.07	0.0	0.0												
18	0.0	0.195	0.0	0.06	0.0	0.0	0.0	0.0	0.14	0.06	0.11	0.0	0.0												
19	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.025	0.0												
20	0.055	0.0	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.015	0.14	0.0	0.0	0.0	0.16	0.09	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.015	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
23	0.0	0.0	0.0	0.0	1.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
24	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.05	0.0	0.31	0.25	0.0	0.0	0.0	0.105	0.0	0.0												
26	0.0	0.145	0.055	0.54	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.035	0.0												
27	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.095	0.0												
28	0.0	0.0	0.035	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.035	0.0	0.0												
29	0.055	0.0	0.05	0.88	0.06	0.0	0.0	0.0	0.0	0.085	0.045	0.0	0.0												
30	0.115	0.0	0.0	0.71	0.0	0.0	0.0	1.24	0.0	0.015	0.025	0.0	0.0												
31	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.51	0.55	0.15	3.77	3.52	1.31	0.55	1.54	2.82	1.83	0.65	0.12													
STA AV	0.29	0.29	0.51	2.13	2.67	3.39	1.63	1.32	1.89	0.64	0.30	0.31													

NOTES: Arithmetic mean of rain gages RL-1, RL-2, RL-3 and RL-4. STA AV based on 9 yr (1963-71) record period.

1971 MEAN DAILY DISCHARGE (cfs) COTTONWOOD, SOUTH DAKOTA WATERSHED L-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.028	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0006	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0019	0.0007	0.0	0.0005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.080	0.525	0.232	0.0	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.004	0.058	0.307	0.0004	0.049	0.219	0.0004	0.0	0.0	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 10.0007. STA AV based on 9 yr (1963-71) record period.

## COTTONWOOD, SOUTH DAKOTA WATERSHED M-1

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.35 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COTTONWOOD, SOUTH DAKOTA WATERSHED M-1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971 P	0.68	1.27	0.27	3.71	3.50	1.24	0.53	1.57	2.83	1.91	0.66	0.14	18.31												
Q	0.032	0.301	0.173	0.0	0.082	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.601												
STA AV P	0.33	0.38	0.57	2.15	2.68	3.40	1.66	1.29	1.46	0.67	0.32	0.39	15.31												
Q	0.004	0.033	0.350	0.0	0.159	0.208	0.009	0.002	0.0	0.002	0.0	0.0	0.766												
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge Date Rate 1 Hour Date Vol. 2 Hours Date Vol. 6 Hours Date Vol. 12 Hours Date Vol. 1 Day Date Vol. 2 Days Date Vol. 8 Days Date Vol.																									
1971	2-11 0.200		3-10 0.047		3-10 0.072		2-11 0.121		2-11 0.122		2-12 0.153		2-11 0.214		2-6 0.300										
MAXIMUMS FOR PERIOD OF RECORD																									
5-30 2.030		5-30 0.710		5-30 0.760		5-30 1.122		5-30 1.122		5-30 1.122		3-8 1.538		3-8 1.913											
1963		1963		1963		1963		1963		1963		1966		1966											

NOTES: Watershed conditions: 100% moderately grazed rangeland. Vegetative cover in late July was 1723 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Risc. Pub. 1216, p. 72-5-7. Arithmetic mean of rain gauges M-1, M-2, M-3 and M-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 9 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1971 DAILY AIR TEMPERATURE (degrees F)													COTTONWOOD, SOUTH DAKOTA WATERSHED M-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	max	min	max	min	max	min	max	min	max	min	max	min		max	min	max	min	max	min	max	min	max	min	max	min
1	40	15	5	-4	36	19	45	24	64	36	67	49	88	45	86	43	96	63	58	48	42	17	36	4	
2	32	6	25	4	29	5	50	19	66	30	77	51	93	59	95	39	104	60	69	42	47	31	43	8	
3	27	2	15	4	43	0	52	22	79	37	80	50	91	61	84	49	103	62	64	43	43	24	41	22	
4	14	-2	16	-13	42	19	46	26	76	44	81	63	91	65	95	59	84	52	74	36	64	27	40	15	
5	7	-8	15	-2	35	22	51	14	66	44	81	53	92	46	95	58	63	51	74	40	60	26	40	18	
6	11	-14	13	4	31	14	72	20	66	33	80	48	96	74	95	57	89	46	78	41	25	10	38	18	
7	17	-16	6	-26	33	6	86	27	62	32	68	51	91	60	95	68	81	53	74	38	48	10	36	13	
8	38	4	16	-12	35	12	64	48	76	38	76	51	90	60	99	65	88	53	61	33	54	4	14	4	
9	35	11	40	-12	43	18	74	29	74	50	81	51	95	60	102	59	79	44	67	26	64	19	43	17	
10	12	-10	43	15	48	25	87	25	74	43	85	50	96	48	102	58	82	46	82	30	67	22	40	8	
11	0	-12	43	16	44	26	83	31	61	38	84	60	84	47	92	47	91	51	73	42	66	26	31	-5	
12	1	-9	38	19	60	27	89	28	71	35	85	57	88	47	100	56	88	51	65	53	66	23	17	-11	
13	11	-6	48	22	68	28	64	22	78	38	80	50	89	62	96	56	93	43	76	27	56	28	18	-7	
14	4	-11	47	28	45	31	78	24	78	47	84	50	91	54	94	54	92	40	67	42	62	34	35	-7	
15	11	-19	51	25	43	29	87	30	71	45	84	62	94	48	97	58	65	32	49	43	51	21	34	10	
16	38	-1	48	29	60	32	79	42	84	39	84	57	94	49	95	65	61	30	44	36	40	31	34	-1	
17	37	12	40	27	60	23	75	37	65	45	83	59	96	49	101	66	59	32	50	32	36	28	34	2	
18	20	3	38	22	37	27	75	54	60	39	91	58	99	49	100	63	59	35	62	45	31	19	42	9	
19	22	-13	30	0	35	20	74	46	60	37	87	58	87	72	92	57	67	32	63	34	43	16	33	20	
20	44	6	28	10	56	15	61	57	71	28	83	55	94	48	97	53	70	33	67	38	50	35	37	17	
21	38	10	24	-4	33	15	58	44	75	44	88	55	101	48	101	52	88	38	69	30	44	23	34	3	
22	36	-11	28	8	49	8	51	48	75	54	85	53	95	60	103	55	61	35	40	37	50	27	37	14	
23	42	4	37	5	28	17	52	40	60	42	94	54	92	53	100	56	71	29	70	29	48	24	47	13	
24	42	7	43	8	38	20	65	31	66	36	93	54	89	64	86	44	78	39	75	45	44	24	40	22	
25	42	7	47	29	51	20	49	35	66	36	93	60	91	55	92	46	84	47	64	40	33	20	39	3	
26	21	3	34	21	68	22	44	31	65	40	97	68	79	40	91	53	81	50	73	33	43	27	5	-3	
27	42	9	33	5	65	42	37	72	73	43	95	66	84	94	56	72	57	71	34	36	22	26	-3		
28	43	14	35	1	55	33	55	27	78	86	94	52	76	38	93	60	65	42	36	21	34	23	41	4	
29	47	12			64	24	66	37	78	56	81	65	76	40	100	69	77	42	26	20	29	21	35	3	
30	14	-15			75	23	64	39	66	56	81	48	84	34	86	64	71	49	21	12	32	21	35	7	
31	12	2			58	30			63	50			93	69	74	60			42	16				45	10
AV.	26	6	32	8	46	21	64	33	70	41	84	55	91	53	95	56	77	45	62	35	47	22	35	6	
MEAN	12.6	20.2	33.6	48.3	55.6	69.7	71.9	75.5	81.0	86.6	84.7	80.4													
STA AV	32	6	36	9	45	18	61	32	71	42	81	52	91	59	89	55	79	46	65	33	49	20	36	10	

NOTES: Temperature data from U.S. Weather Station records at Cottonwood, South Dakota for 24 hour period ending at 1700. STA AV based on 62 yr (1910-71) record period.

1971 DAILY PRECIPITATION (Inches)												COTTONWOOD, SOUTH DAKOTA WATERSHED R-1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0											
3	0.0	0.02S	0.0	0.04S	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.17	0.0	0.0											
5	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.07	0.0	0.0	0.0	0.02S											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.12S											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0											
9	0.02S	0.0	0.0	0.0	0.03	0.08	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.01S	0.04S	0.0	0.0	0.54	0.10	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.05S	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.04S											
16	0.0	0.0	0.0	0.0	0.12	0.13	0.0	0.0	0.0	0.15	0.23S	0.0											
17	0.21S	0.0	0.13S	0.23	0.0	0.0	0.07	0.0	0.0	1.13	0.0	0.0											
18	0.0	0.34S	0.0	0.06	0.0	0.0	0.0	0.14	0.06	0.11	0.0	0.0											
19	0.0	0.0	0.0	1.93	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.0											
20	0.08S	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0											
21	0.0	0.0	0.03S	0.11	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.03S	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.04	0.0	0.32	0.24	0.0	0.0	0.0	0.12S	0.0											
26	0.0	0.67S	0.05S	0.53	0.0	0.09	0.0	0.0	0.0	0.0	0.03S	0.0											
27	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.11S	0.0											
28	0.0	0.0	0.03S	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.06S	0.0	0.0	0.04	0.47	0.09	0.0	0.0	0.0	0.11S	0.03S	0.0											
30	0.16S	0.0	0.0	0.71	0.0	0.0	1.25	0.0	0.03S	0.02S	0.0	0.0											
31	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
TOTAL	0.68	1.27	0.27	3.71	3.50	1.24	0.53	1.57	2.83	1.91	0.66	0.14											
STA AV	0.33	0.38	0.57	2.15	2.68	3.40	1.66	1.29	1.46	0.67	0.32	0.39											

NOTES: Arithmetic mean of rain gages RM-1, RM-2, RM-3 and RM-4. STA AV based on 9 yr (1963-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												COTTONWOOD, SOUTH DAKOTA WATERSHED R-1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
10	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
11	0.0	0.012	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
13	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
14	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0001	0.0011	0.0005	0.0	0.0003	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
INCHES	0.032	0.301	0.173	0.0	0.002	0.0	0.0	0.0	0.0	0.014	0.0	0.17											
STA AV	0.004	0.033	0.350	0.0	0.159	0.208	0.009	0.002	0.0	0.002	0.0	0.0											

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 10.1283. STA AV based on 9 yr (1963-71) record period.

## ABOSKIE, NORTH CAROLINA WATERSHED W-A1

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 3/4 mile southwest of Aboskie; Chowan River Basin.

AREA: 36480.00 acres 57.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)												ABOSKIE, NORTH CAROLINA WATERSHED W-A1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual										
1971 P	3.81	5.10	3.72	2.82	3.95	2.21	3.83	7.87	5.82	7.69	1.20	1.18	87.96										
Q	1.762	4.778	2.598	1.862	0.292	0.211	0.194	0.939	0.446	0.595	0.685	0.570	20.330										
STA AV P	3.31	3.55	3.38	2.44	3.84	4.28	5.09	4.79	3.21	3.23	1.63	2.61	42.15										
Q	1.851	2.766	2.733	1.365	0.866	0.753	1.167	1.207	0.339	1.299	0.286	0.839	15.471										
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																							
Maximum Discharge												Maximum Volume for Selected Time Interval											
Date	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
1971	2-13	0.030	2-13	0.030	2-13	0.060	2-13	0.180	2-13	0.350	2-13	0.600	10-23	1.170	9-30	2.650							
MAXIMUMS FOR PERIOD OF RECORD																							
	10-5	0.070	10-5	0.070	10-5	0.140	10-5	0.420	10-5	0.830	10-5	1.650	10-5	3.020	10-3	4.140							
	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964							

NOTES: Watershed conditions: Woodland, 65%; row crops, 30%; pasture, 2%; roads, urban, and homesites, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation began in 1964. Records of runoff began in 1950. STA AV computed on 1965-71 data. Precipitation thimble weighted using 10 gages. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1971 DAILY AIR TEMPERATURE (degrees F)												ABOSKIE, NORTH CAROLINA WATERSHED W-A1											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1	45	25	34	14	68	45	72	32	70	34	86	55	90	70	87	65	86	65	76	68	84	58	50
2	52	18	32	8	59	40	75	60	76	45	85	60	87	68	89	60	84	57	75	64	81	61	44
3	55	21	36	19	49	41	65	38	74	43	86	59	85	63	90	67	85	59	73	65	76	63	37
4	67	38	35	25	52	27	74	32	68	36	91	63	84	58	89	67	88	60	76	68	70	37	51
5	70	55	65	30	56	23	66	38	78	39	90	63	86	55	89	66	89	61	84	55	63	30	53
6	58	36	64	28	64	32	62	42	86	57	93	66	89	66	83	62	88	64	82	63	66	47	69
7	42	32	64	28	64	42	45	34	82	54	95	69	87	66	86	59	87	59	79	53	61	42	72
8	39	24	64	35	55	38	65	31	82	65	95	65	90	63	88	55	83	60	70	40	53	22	68
9	32	22	54	26	51	24	76	36	81	52	85	66	91	64	90	58	86	64	77	44	56	35	56
10	36	28	36	16	58	23	75	50	75	44	85	58	89	67	90	60	89	68	73	58	61	36	72
11	52	32	49	17	60	34	69	30	80	44	84	51	92	68	89	65	87	68	69	41	70	31	76
12	52	28	65	23	68	28	81	35	82	53	86	55	85	62	87	66	83	66	77	43	76	45	74
13	51	30	63	36	74	46	86	42	81	63	85	63	84	60	83	60	81	61	79	44	65	44	72
14	61	35	81	25	76	46	85	53	78	53	86	65	91	66	85	67	80	57	82	52	72	48	70
15	59	38	55	21	77	NR	65	30	75	48	86	64	90	63	90	61	85	54	82	49	74	44	75
16	42	24	53	26	71	47	74	38	70	58	75	63	88	64	87	65	NR	NR	79	53	64	54	78
17	46	23	60	21	69	37	78	37	82	49	78	59	90	66	78	65	NR	NR	77	53	68	33	76
18	39	26	67	26	53	22	76	46	84	52	84	55	93	68	84	67	86	64	NR	NR	75	40	57
19	32	19	74	35	65	34	80	40	80	53	81	63	92	68	89	67	NR	NR	70	51	71	49	52
20	36	13	70	50	65	NR	80	42	90	59	87	64	86	67	90	68	88	60	70	62	68	39	62
21	51	13	69	45	56	NR	84	43	88	58	91	62	87	67	91	68	87	62	78	61	57	34	66
22	48	39	73	47	69	NR	78	56	75	49	90	63	83	56	90	64	75	60	72	62	44	33	59
23	58	38	68	52	66	47	67	32	75	42	85	64	83	55	87	67	81	55	70	63	52	18	55
24	53	28	56	28	50	26	73	42	78	49	88	65	87	62	86	60	80	59	80	63	52	33	68
25	45	33	61	30	86	19	75	33	82	68	91	65	86	69	84	53	76	48	79	64	57	28	64
26	45	32	70	34	45	31	81	37	85	69	92	70	87	69	82	65	79	44	75	59	51	24	67
27	49	19	74	56	44	23	70	39	86	52	93	67	85	69	75	68	80	50	75	60	55	39	73
28	35	10	70	43	64	25	71	49	85	57	95	69	87	64	86	64	83	54	74	60	55	27	75
29	46	11			60	47	73	67	64	54	95	67	84	69	85	62	80	72	62	64	34	70	36
30	63	40			52	37	72	42	63	52	90	67	89	68	85	57	75	65	84	64	65	40	35
31	59	30			58	29			77	54			87	70	87	57			78	63			70
AV	49	28	58	30	60	34	73	41	79	52	88	63	88	65	86	63	84	59	76	57	64	39	65
STAN	38.6	44.1			46.9		57.2		65.3		75.3		76.2		74.8		71.4		66.5		51.6		52.0
STA AV	51	28	53	31	62	37	73	46	80	54	86	61	89	66	87	64	82	58	73	48	63	37	53

NOTES: Temperature data from National Weather Service Station records at Lewiston, North Carolina. STA AV based on 18 yr (1954-71) record period.

1971 DAILY PRECIPITATION (inches)							ABOSKIE, NORTH CAROLINA WATERSHED W-1					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.03	0.0	0.0	0.0	0.0	0.02	0.08	0.31	0.0	1.50	0.0	0.0
2	0.0	0.0	0.35	0.39	0.10	0.0	0.94	0.07	0.0	0.75	0.04	0.0
3	0.0	0.07	1.28	0.13	0.14	0.0	0.0	0.0	0.0	0.0	0.33	0.07
4	0.05	0.75	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0
5	1.36	0.24	0.0	0.0	0.0	0.40	0.0	0.28	0.01	0.06	0.0	0.0
6	0.0	0.0	0.0	1.47	0.0	0.0	0.93	0.0	0.0	0.59	0.0	0.0
7	0.0	1.05	0.0	0.07	0.09	0.0	0.02	0.0	0.06	0.0	0.0	0.03
8	0.0	0.27	0.0	0.0	0.11	0.30	0.0	0.0	0.01	0.0	0.0	0.0
9	0.29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.09	0.0	0.0	0.01
10	0.31	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.02	1.00	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.10	0.0	0.0	0.01
12	0.0	0.0	0.0	0.0	0.0	0.11	0.0	1.21	0.0	0.0	0.14	0.0
13	0.0	1.35	0.0	0.0	0.86	0.03	0.0	0.0	0.04	0.0	0.0	0.07
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.37	0.0	0.53	0.0	0.35	0.55	0.02	0.0	0.0	0.0	0.0	0.05
16	0.0	0.0	0.0	0.0	0.44	0.11	0.04	0.22	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.15
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.72	0.0	0.0	0.0	0.0
19	0.0	0.0	0.22	0.0	0.0	0.0	0.21	0.01	0.0	0.12	0.0	0.0
20	0.0	0.01	0.02	0.0	0.0	0.0	0.07	0.0	0.0	0.11	0.0	0.53
21	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.04	0.0	0.0	0.0
22	0.15	1.15	0.0	0.0	0.0	0.47	0.0	1.56	0.0	0.72	0.0	0.0
23	0.27	0.09	0.03	0.16	0.0	0.0	0.05	0.0	0.0	2.15	0.0	0.0
24	0.35	0.0	0.0	0.01	0.0	0.01	0.0	0.26	0.0	0.02	0.57	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.29	0.0	0.0
26	0.0	0.12	0.64	0.0	0.0	0.0	0.27	2.07	0.0	0.0	0.0	0.0
27	0.0	0.0	0.23	0.0	0.02	0.0	0.64	1.70	0.0	0.02	0.25	0.0
28	0.0	0.0	0.02	0.19	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0
29	0.0	0.39	0.0	0.0	1.24	0.21	0.0	0.0	0.12	0.01	0.0	0.0
30	0.45	0.0	0.0	0.12	0.0	0.0	0.01	0.0	3.93	0.03	0.0	0.0
31	0.18	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0
TOTAL	3.81	5.10	3.72	2.42	3.95	2.21	3.83	7.47	5.42	7.69	1.20	1.14
STA AV	3.31	3.55	3.38	2.44	3.84	4.28	5.89	4.79	3.21	3.23	1.63	2.61

NOTES: Precipitation values are Thiessen weighted averages of 10 gages. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)							ABOSKIE, NORTH CAROLINA WATERSHED W-1					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.00	132.00	79.00	103.00	19.00	19.00	7.10	8.30	35.00	839.00	80.00	28.00
2	22.00	85.00	72.00	76.00	13.00	13.00	13.00	6.50	26.00	906.00	66.00	24.00
3	20.00	62.00	392.00	126.00	14.00	13.00	36.00	5.70	20.00	850.00	76.00	24.00
4	18.00	127.00	786.00	114.00	13.00	11.00	13.00	5.00	17.00	589.00	101.00	23.00
5	217.00	484.00	399.00	79.00	12.00	11.00	8.60	4.80	15.00	247.00	69.00	22.00
6	357.00	395.00	208.00	433.00	12.00	13.00	8.30	5.00	13.00	248.00	52.00	22.00
7	146.00	291.00	184.00	700.00	11.00	10.00	24.00	5.00	12.00	283.00	43.00	22.00
8	93.00	767.00	104.00	344.00	12.00	10.00	4.30	17.00	4.80	130.00	36.00	22.00
9	105.00	628.00	77.00	191.00	11.00	13.00	10.00	4.50	10.00	84.00	32.00	21.00
10	121.00	280.00	62.00	125.00	10.00	10.00	8.60	4.50	9.60	185.00	30.00	20.00
11	128.00	175.00	55.00	86.00	9.60	9.30	7.60	4.30	9.30	384.00	28.00	19.00
12	101.00	133.00	49.00	63.00	9.30	8.30	10.00	4.30	38.00	200.00	26.00	18.00
13	78.00	541.00	45.00	50.00	18.00	9.30	9.00	4.10	65.00	119.00	24.00	20.00
14	64.00	702.00	43.00	41.00	18.00	8.30	7.60	4.10	34.00	78.00	22.00	24.00
15	71.00	319.00	41.00	35.00	13.00	17.00	7.10	4.10	22.00	57.00	21.00	22.00
16	113.00	192.00	89.00	31.00	27.00	15.00	6.90	4.10	17.00	43.00	20.00	21.00
17	85.00	135.00	72.00	27.00	22.00	11.00	6.40	4.10	14.00	36.00	19.00	22.00
18	68.00	104.00	57.00	24.00	16.00	10.00	6.20	6.40	13.00	30.00	18.00	24.00
19	56.00	83.00	53.00	21.00	13.00	9.30	6.20	7.60	11.00	26.00	18.00	24.00
20	46.00	70.00	66.00	20.00	11.00	8.60	6.20	6.20	11.00	26.00	17.00	33.00
21	39.00	62.00	55.00	19.00	11.00	8.30	6.20	4.80	10.00	26.00	17.00	83.00
22	36.00	87.00	49.00	18.00	11.00	14.00	5.90	15.00	10.00	25.00	16.00	62.00
23	50.00	635.00	45.00	18.00	10.00	15.00	5.70	78.00	9.60	613.00	16.00	45.00
24	76.00	317.00	44.00	18.00	13.00	9.30	5.70	40.00	9.30	89.00	17.00	38.00
25	121.00	176.00	41.00	17.00	9.60	9.60	5.80	20.00	9.00	862.00	25.00	34.00
26	102.00	128.00	50.00	16.00	9.00	8.30	5.90	64.00	8.60	632.00	28.00	31.00
27	77.00	116.00	69.00	15.00	8.60	7.60	11.00	339.00	8.30	273.00	28.00	28.00
28	57.00	101.00	159.00	15.00	9.30	7.10	8.30	450.00	7.90	169.00	37.00	26.00
29	46.00	193.00	153.00	15.00	32.00	6.60	11.00	181.00	7.60	130.00	33.00	25.00
30	43.00	239.00	239.00	14.00	33.00	6.60	7.10	85.00	200.00	115.00	31.00	24.00
31	123.00	154.00	154.00	25.00	25.00	25.00	6.40	54.00	9.00	93.00	21.00	22.00
MEAN	87.10	261.54	128.45	95.13	14.42	10.78	9.59	86.41	22.77	296.39	35.00	28.16
INCHES	1.762	4.778	2.598	1.862	0.292	0.211	0.194	0.939	0.446	5.995	0.685	0.570
STA AV	1.851	2.766	2.733	1.365	0.866	0.753	1.167	1.207	0.339	1.299	0.286	0.839

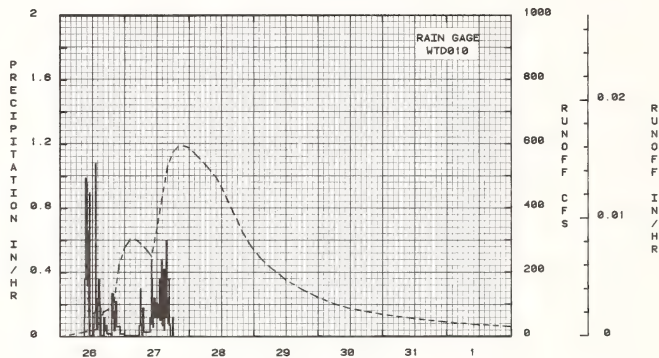
NOTES: To convert mean daily discharge in CFS to IN/DAI, multiply by 0.0006525. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 7 yr (1965-71) record period.

1971 SELECTED RUNOFF EVENT										ANOSKIE, NORTH CAROLINA WATERSHED W-A1									
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.					
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)					
EVENT OF AUGUST 25 - 1 7																			
RG WTD010																			
8-26	0.0		8-26	900	0.0	0.0	8-25	2400	0.0	0.0									
8-25	0.0	0.0		910	0.1200	0.02	8-26	1000	18.000	0.0024									
				925	0.3600	0.11		1200	20.000	0.0034									
				945	0.9900	0.44		1400	26.000	0.0047									
				1000	0.3600	0.53		1600	77.000	0.0075									
WATERSHED CONDITIONS:																			
Approximate land use 65% in woodland, 30% in row crops, 2% in pasture, 3% misc. (roads, homesites, and urban areas).																			
				1005	0.9600	0.61		1800	87.000	0.0120									
				1020	0.3200	0.69		2000	109.000	0.0173									
				1030	0.6600	0.80		2200	227.000	0.0264									
				1040	0.1200	0.82		2400	279.000	0.0402									
				1045	0.3600	0.85	8-27	200	303.000	0.0560									
				1050	0.0	0.85		400	304.000	0.0725									
				1055	0.3600	0.88		600	289.000	0.0886									
				1105	0.9000	1.03		800	272.000	0.1039									
				1225	0.0075	1.04		1000	250.000	0.1181									
				1235	0.0600	1.05		1200	340.000	0.1341									
				1310	0.1583	1.14		1400	437.000	0.1552									
				1315	1.0800	1.23		1600	533.000	0.1816									
				1330	0.0800	1.25		1800	575.000	0.2117									
				1350	0.0600	1.27		2000	593.000	0.2435									
				1355	0.2400	1.29		2200	594.000	0.2758									
				1405	0.0600	1.30		2400	588.000	0.3079									
				1420	0.2000	1.35	8-28	200	571.000	0.3394									
				1435	0.3600	1.44		400	554.000	0.3700									
				1445	0.2400	1.48		600	536.000	0.3996									
				1455	0.0	1.48		800	516.000	0.4282									
				1505	0.1800	1.51		1000	496.000	0.4557									
				1620	0.0080	1.52		1200	465.000	0.4818									
				1630	0.1200	1.54		1400	430.000	0.5061									
				1700	0.0400	1.56		1600	393.000	0.5285									
				1725	0.0720	1.59		1800	360.000	0.5490									
				1900	0.0189	1.62		2000	322.000	0.5675									
				1910	0.0	1.62		2200	294.000	0.5842									
				1930	0.2700	1.71		2400	276.000	0.5995									
				1940	0.1200	1.73	8-29	200	249.000	0.6136									
				1955	0.1600	1.77		400	231.000	0.6266									
				2005	0.1200	1.79		600	216.000	0.6388									
				2020	0.0400	1.80		800	203.000	0.6502									
				2030	0.1200	1.82		1000	190.000	0.6609									
				2100	0.2200	1.93		1200	176.000	0.6708									
				2215	0.0640	2.01		1800	146.000	0.6971									
				2400	0.0171	2.04		2400	121.000	0.7199									
8-27				525	0.0074	2.08	8-30	600	101.000	0.7370									
				550	0.0720	2.11		1200	86.000	0.7523									
				600	0.3000	2.16		1800	77.000	0.7656									
				630	0.0800	2.20		2400	68.000	0.7774									
				645	0.0	2.20	8-31	1200	54.000	0.7973									
				705	0.1800	2.26		2400	43.000	0.8131									
				925	0.0300	2.33	9- 1	1200	35.000	0.8258									
				940	0.1200	2.36		2400	29.000	0.8362									
				955	0.0800	2.38													
				1005	0.4800	2.46													
				1020	0.3600	2.55													
				1030	0.1800	2.58													
				1040	0.0600	2.59													
				1045	0.2400	2.61													
				1100	0.1600	2.65													
				1115	0.2400	2.71													
				1145	0.1200	2.77													
				1205	0.2100	2.84													
				1225	0.1200	2.88													
				1240	0.2000	2.93													
				1255	0.1200	2.96													
				1305	0.3600	3.02													
				1340	0.1025	3.08													
				1400	0.4800	3.24													
				1425	0.0720	3.27													
				1435	0.4200	3.34													
				1450	0.0400	3.35													
				1500	0.4200	3.42													
				1530	0.1200	3.48													

NOTES: To convert CFS to IN/HR, multiply by 0.0002719. Precipitation is Thiessen average of 10 rain gages.

1971			SELECTED RUNOFF EVENT			ABOSKIE, NORTH CAROLINA WATERSHED 8-A1					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF AUGUST 25 - 1 7											
			8-27	1535	0.6000	3.53					
				1600	0.1200	3.58					
				1610	0.2400	3.62					
				1630	0.0900	3.65					
				1635	0.3600	3.68					
						1700	0.0720	3.71			
						1750	0.0	3.71			
						1805	0.1200	3.74			

NOTES: To convert CFS to IN/HR, multiply by 0.00002719. Precipitation is Thiessen average of 10 rain gages.



ABOSKIN, NORTH CAROLINA WATERSHED W-A1

## AHOSSIE, NORTH CAROLINA WATERSHED W-A2

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 5 miles northwest of Aulander; Chowan River Basin.

AREA: 15360.00 acres 24.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													AUGUST, NORTH CAROLINA WATERSHED W-A2												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1971	P	3.89	4.85	3.47	2.48	3.66	1.82	3.77	6.73	4.75	7.68	1.16	1.14	45.36											
	Q	2.228	4.526	2.180	1.687	0.252	0.162	0.177	0.756	0.230	4.479	0.546	0.479	17.702											
STA AV	P	3.30	3.38	3.26	2.39	3.77	4.28	5.52	4.57	3.06	3.25	1.62	2.56	40.97											
	Q	1.680	2.577	2.266	1.177	0.813	0.831	1.011	0.951	0.225	1.098	0.248	0.758	13.636											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		Maximum Volume for Selected Time Interval							
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.								
1971		10-24	0.050	10-24	0.050	10-24	0.100	10-23	0.290	10-23	0.550	10-23	0.970	10-23	1.450	9-30	1.920								
MAXIMUMS FOR PERIOD OF RECORD																									
		10-5	0.080	10-5	0.080	10-5	0.170	10-5	0.500	10-5	0.970	10-5	1.640	10-4	2.370	10-3	3.060								
		1964		1964		1964		1964		1964		1964		1964		1964									

NOTES: Watershed conditions: Woodland, 75%; row crops, 22%; pasture, 2%; roads & homesites, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, P. 75-1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-71 data. Precipitation Thiessen weighted using 5 gages. For temperature information, see table of maxima and minima values included with data for Watershed 75-001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1971 DAILY PRECIPITATION (inches)													ABOSKIE, NORTH CAROLINA WATERSHED W-A2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.03	0.0	0.0	0.0	0.0	0.0	0.08	0.03	0.03	0.0	1.61	0.0	0.0												
2	0.0	0.0	0.51	0.38	0.10	0.0	0.83	0.03	0.0	0.65	0.05	0.0													
3	0.0	0.04	1.06	0.15	0.14	0.0	0.0	0.0	0.0	0.0	0.30	0.04													
4	0.04	0.63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.10													
5	1.58	0.37	0.0	0.0	0.0	0.0	0.55	0.0	0.39	0.0	0.11	0.0													
6	0.0	0.0	0.0	0.0	1.49	0.0	0.0	1.08	0.0	0.0	0.59	0.0	0.0												
7	0.0	1.04	0.0	0.09	0.06	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.05												
8	0.0	0.35	0.0	0.10	0.21	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0												
9	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.09	0.0	0.0												
10	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.97	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.10	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.95	0.0	0.0	0.13												
13	0.0	1.19	0.0	0.0	0.69	0.05	0.0	0.0	0.05	0.0	0.0	0.10	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
15	0.33	0.0	0.53	0.0	0.35	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.05												
16	0.0	0.0	0.0	0.0	0.0	0.38	0.08	0.06	0.17	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.14												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.24	0.02	0.0	0.10	0.0	0.0												
20	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.11	0.0	0.52												
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
22	0.14	0.97	0.0	0.0	0.0	0.0	0.23	0.0	1.35	0.0	0.76	0.0	0.0												
23	0.27	0.15	0.06	0.14	0.0	0.0	0.0	0.06	0.0	0.12	0.0	0.0	0.0												
24	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.57	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0												
26	0.0	0.09	0.41	0.0	0.0	0.0	0.0	0.23	2.39	0.0	0.0	0.0	0.0												
27	0.0	0.0	0.41	0.0	0.04	0.0	0.0	0.74	1.49	0.0	0.0	0.23	0.0												
28	0.0	0.0	0.0	0.19	0.44	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0												
29	0.0	0.12	0.0	0.36	1.25	0.36	0.0	0.0	0.0	0.0	0.0	0.11	0.0												
30	0.35	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	3.65	0.08	0.0	0.0												
31	0.19	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	3.89	4.85	3.47	2.44	3.66	1.82	3.77	6.73	4.75	7.68	1.16	1.14													
STA AV	3.30	3.38	3.26	2.39	3.77	4.28	5.52	4.57	3.06	3.25	1.62	2.56													

NOTES: Precipitation values are Thiessen weighted averages of 5 gages. STA AV based on 7 yr (1965-71) record period.

1971 MEAN DAILY DISCHARGE (cfs)												ABOSKIE, NORTH CAROLINA WATERSHED W-42											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	14.00	52.00	30.00	35.00	4.20	5.90	2.80	1.40	9.80	350.00	25.00	10.00											
2	12.00	32.00	32.00	26.00	4.50	4.50	2.70	2.00	6.60	286.00	21.00	8.20											
3	10.00	22.00	205.00	56.00	5.10	3.50	16.00	1.70	4.20	182.00	27.00	7.50											
4	10.00	88.00	270.00	44.00	5.10	3.70	2.50	1.30	3.20	82.00	30.00	8.00											
5	215.00	205.00	102.00	29.00	4.70	10.00	1.80	1.50	2.70	50.00	21.00	8.30											
6	159.00	139.00	66.00	279.00	3.20	3.30	5.40	2.20	2.50	91.00	16.00	8.60											
7	73.00	151.00	52.00	209.00	3.70	2.50	32.00	1.50	2.40	71.00	14.00	10.00											
8	52.00	431.00	38.00	102.00	3.70	6.30	3.50	0.91	2.20	36.00	12.00	9.20											
9	60.00	201.00	28.00	64.00	3.80	4.20	2.30	0.62	2.00	20.00	10.00	8.00											
10	64.00	92.00	21.00	45.00	2.80	1.40	2.00	0.51	1.70	65.00	9.20	7.80											
11	67.00	64.00	19.00	31.00	2.50	1.30	1.80	0.43	1.50	100.00	7.30	6.60											
12	53.00	52.00	15.00	22.00	2.30	1.50	3.30	0.47	6.90	45.00	9.20	6.60											
13	42.00	272.00	12.00	17.00	8.00	2.20	2.00	0.51	15.00	34.00	6.90	9.50											
14	34.00	187.00	9.20	15.00	4.00	2.00	1.80	0.51	6.60	23.00	6.30	8.00											
15	45.00	92.00	16.00	12.00	2.30	2.00	1.50	0.55	2.70	18.00	5.90	7.80											
16	52.00	64.00	40.00	10.00	10.00	2.20	1.10	0.55	1.50	14.00	6.30	8.00											
17	40.00	49.00	27.00	8.80	6.30	2.20	1.00	4.90	1.10	12.00	6.30	8.60											
18	32.00	40.00	17.00	8.00	3.00	2.00	0.82	2.90	1.00	11.00	5.90	9.50											
19	24.00	32.00	14.00	7.60	2.30	1.90	0.66	2.70	0.83	9.50	6.30	7.80											
20	18.00	28.00	20.00	11.00	2.30	2.00	0.83	1.20	0.74	9.80	7.50	19.00											
21	13.00	26.00	16.00	6.80	2.80	2.30	1.00	0.62	0.66	10.00	7.20	27.00											
22	13.00	54.00	13.00	6.30	2.80	3.50	1.20	1.30	0.66	11.00	6.30	20.00											
23	33.00	253.00	11.00	6.30	2.80	8.00	1.20	124.00	0.66	429.00	5.20	15.00											
24	42.00	96.00	9.60	6.80	3.70	4.20	1.70	8.00	0.66	468.00	7.50	13.00											
25	60.00	63.00	8.80	5.90	4.20	3.70	2.00	1.80	0.66	196.00	14.00	11.00											
26	47.00	48.00	15.00	5.50	3.70	3.30	2.00	69.00	0.66	85.00	10.00	9.80											
27	33.00	48.00	32.00	5.10	4.50	3.50	2.40	134.00	0.66	53.00	11.00	8.30											
28	22.00	40.00	60.00	5.50	3.00	3.00	0.66	12.00	0.66	41.00	19.00	7.80											
29	16.00	76.00	76.00	4.70	24.00	3.00	2.70	52.00	0.66	32.00	13.00	6.90											
30	17.00	80.00	4.20	14.00	5.50	5.50	1.30	26.00	67.00	28.00	12.00	6.90											
31	62.00	52.00		9.60			1.00	16.00		28.00		6.60											
MEAN	46.39	104.32	45.37	36.28	5.24	3.49	3.69	15.74	4.94	93.24	11.75	9.98											
INCHES	2.228	4.526	2.180	1.687	0.252	0.162	0.177	0.756	0.230	4.479	0.546	0.479											
STA AV	1.680	2.577	2.266	1.177	0.813	0.531	1.011	0.551	0.225	1.098	0.248	0.758											

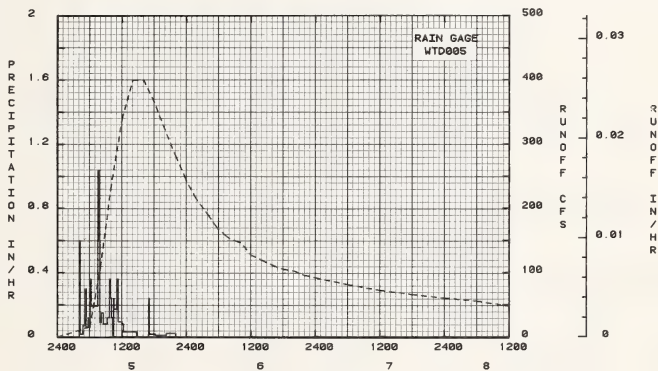
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0015496. Runoff data furnished by U.S. Geological Survey. Records are good. STA AV based on 7 yr (1965-71) record period.

1971 SELECTED RUNOFF EVENT												ABOSKIE, NORTH CAROLINA WATERSHED W-42											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		Mo-Day	of Day	(cfs)	(inches)								
EVENT OF JANUARY 4 - 8, 1971																							
RG WTD005												RG WTD005											
1-5	0.0		1-5	255	0.0	0.0	1-4	2400	0.0	0.0													
1-4		0.0		405	0.0	0.0	1-5	600	15.800	0.0031													
				410	0.0000	0.05		800	109.000	0.0112													
				445	0.0171	0.06		1000	236.000	0.0336													
				510	0.0720	0.09		1200	340.000	0.0709													
				520	0.3000	0.14		1400	400.000	0.1187													
				540	0.0600	0.16		1600	400.000	0.1704													
				545	0.1200	0.17		1800	365.000	0.2198													
				555	0.0600	0.18		2000	322.000	0.2492													
				605	0.0600	0.19		2200	281.198	0.3031													
				615	0.3600	0.25		2400	242.500	0.3369													
				730	0.1920	0.45		200	212.200	0.3663													
				745	1.0400	0.75		400	190.000	0.3923													
				750	0.6000	0.80		600	166.900	0.4153													
				810	0.0900	0.83		800	152.900	0.4359													
				830	0.1500	0.88		1000	186.400	0.4552													
				915	0.0800	0.94		1200	127.700	0.4729													
				930	0.1200	0.97		1400	119.200	0.4888													
				940	0.1200	0.99		1600	111.400	0.5037													
				945	0.3600	1.02		1800	104.800	0.5177													
				1000	0.2400	1.08		2000	102.500	0.5311													
				1015	0.1200	1.11		2200	95.500	0.5439													
				1025	0.0	1.11		2400	91.500	0.5560													
				1030	0.2400	1.13		2600	81.000	0.5894													
				1105	0.1714	1.23		1200	72.000	0.6190													
				1115	0.3600	1.29		1800	65.600	0.6457													
				1200	0.0933	1.36		2400	60.000	0.6700													
				1215	0.0800	1.38		600	55.600	0.6924													
				1445	0.0320	1.46		1200	47.200	0.7123													
				1700	0.0	1.46		2000	47.600	0.7368													

NOTES: To convert CFS to IN/RS, multiply by 0.00006457. Precipitation is Thiessen average of 5 rain gages.

1971 SELECTED RUNOFF EVENT						AHOSKIE, NORTH CAROLINA WATERSHED W-12					
ANTICIPATED CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 4 - 8, 1971 (CONTINUED)											
1- 5	1705	0.2400	1-48								
	1815	0.0171	1-50								
	2015	0.0100	1-52								
	2200	0.0229	1-56								

NOTES: To convert CFS to IN/HR, multiply by 0.00006457. Precipitation is Thiessen average of 5 rain gages.



EVENT OF JANUARY 4 - 8, 1971  
AHOSKIE, NORTH CAROLINA WATERSHED W-12

## ABOSKIE, NORTH CAROLINA WATERSHED W-A3

LOCATION: Northampton County, North Carolina, approximately 3 miles southeast of Rich Square; Chowan River Basin.

AREA: 2368.00 acres 3.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														ABOSKIE, NORTH CAROLINA WATERSHED W-A3																	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1971	P	3.81	4.58	3.45	2.58	3.88	1.69	4.28	7.71	4.63	8.11	1.17	1.03	46.48																	
	Q	1.329	4.248	1.824	1.484	0.031	0.010	0.010	0.120	0.032	2.555	0.281	0.185	12.108																	
STA AV	P	3.38	3.43	3.19	2.49	3.82	4.31	5.39	4.85	3.10	3.41	1.65	2.65	41.68																	
	Q	1.133	2.105	1.743	1.031	0.682	0.377	0.793	0.637	0.161	0.624	0.066	0.530	9.881																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
Maximum Discharge												Maximum Volume for Selected Time Interval																			
1 Hour				2 Hours				6 Hours				12 Hours				1 Day				2 Days				8 Days							
Date		Date		Date		Vol.		Date		Date		Vol.		Date		Vol.		Date		Date		Vol.		Date		Vol.					
1971		2- 7		0.050		2- 7		0.100		2- 7		0.260		2- 7		0.420		2- 7		0.660		2- 7		1.000		2- 7		1.720			
MAXIMUMS FOR PERIOD OF RECORD																															
10- 5		0.120		10- 5		0.120		10- 5		0.240		10- 5		0.670		10- 5		1.240		10- 5		1.880		10- 5		2.570		10- 5		3.490	
1964				1964				1964				1964				1964				1964				1964				1964			

NOTES: Watershed conditions: Woodland, 88%; row crops, 10%; homesites, pastures, and roads, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-71 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included with data for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

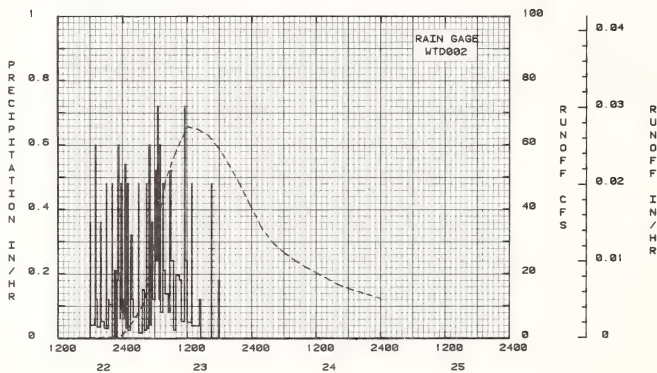
1971					ABOSKIE, NORTH CAROLINA WATERSHED #A-3																	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec										
1	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	1.67	0.0	0.0										
2	0.0	0.0	0.85	0.44	0.08	0.0	0.58	0.0	0.0	0.73	0.04	0.0										
3	0.0	0.08	0.74	0.13	0.08	0.0	0.0	0.0	0.0	0.0	0.30	0.0										
4	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.07										
5	1.78	0.32	0.0	0.0	0.0	0.63	0.0	0.72	0.0	0.08	0.0	0.0										
6	0.0	0.0	0.0	1.54	0.0	0.0	1.52	0.0	0.0	0.63	0.0	0.0										
7	0.0	1.28	0.0	0.04	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.05										
8	0.0	0.21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
9	0.33	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.07	0.0	0.04										
10	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.93	0.0	0.0										
11	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.12	0.0	0.0	0.0										
12	0.0	0.0	0.0	0.0	0.0	0.14	0.02	0.0	1.04	0.0	0.0	0.13										
13	0.0	1.01	0.0	0.0	0.92	0.09	0.0	0.0	0.0	0.0	0.0	0.10										
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
15	0.25	0.0	0.55	0.0	0.27	0.11	0.0	0.0	0.0	0.0	0.0	0.03										
16	0.0	0.0	0.0	0.0	0.80	0.0	0.13	0.42	0.0	0.0	0.0	0.0										
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.17										
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0										
19	0.0	0.0	0.11	0.0	0.0	0.0	0.20	0.0	0.0	0.09	0.0	0.0										
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.44										
21	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0										
22	0.12	0.82	0.0	0.0	0.0	0.30	0.0	1.86	0.0	0.71	0.0	0.0										
23	0.21	0.03	0.09	0.16	0.0	0.0	0.0	0.04	0.0	2.32	0.0	0.0										
24	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.50	0.0	0.0										
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0										
26	0.0	0.10	0.56	0.0	0.0	0.0	0.22	2.64	0.0	0.0	0.0	0.0										
27	0.0	0.28	0.0	0.04	0.0	0.95	1.29	0.0	0.0	0.0	0.30	0.0										
28	0.0	0.0	0.0	0.23	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
29	0.0	0.27	0.0	0.0	0.99	0.38	0.0	0.0	0.0	0.19	0.03	0.0										
30	0.36	0.0	0.0	0.0	0.16	0.0	0.0	0.0	3.47	0.06	0.0	0.0										
31	0.17	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0										
TOTAL	3.81	4.54	3.45	2.54	3.48	1.69	4.28	7.71	4.63	8.11	1.17	1.03										
STA AV	3.38	3.43	3.19	2.49	3.82	4.31	5.39	4.85	3.10	3.41	1.65	2.65										

NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 7 yr (1965-71) record period.



1971 SELECTED RUNOFF EVENT						ABOSKIE, NORTH CAROLINA WATERSHED W-A3					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF OCTOBER 22 - 24, 1971 (CONTINUED)											
10-23				340	0.0150	1.13					
				400	0.1500	1.18					
				425	0.0240	1.19					
				430	0.4800	1.23					
				450	0.0300	1.24					
				505	0.6000	1.39					
				520	0.0400	1.40					
				535	0.3600	1.49					
				600	0.1200	1.54					
				615	0.5200	1.67					
				630	0.2400	1.73					
				635	0.7200	1.79					
				685	0.2400	1.83					
				655	0.1200	1.85					
				700	0.6000	1.90					
				730	0.0800	1.94					
				735	0.4800	1.98					
				755	0.2100	2.05					
				830	0.1371	2.13					
				845	0.0800	2.15					
				900	0.5200	2.28					
				930	0.2400	2.40					
				955	0.0240	2.41					
				1035	0.1950	2.54					
				1055	0.1800	2.60					
				1130	0.0514	2.63					
				1135	0.7200	2.69					
				1200	0.2400	2.79					
				1250	0.0400	2.83					
				1255	0.4800	2.87					
				1415	0.0375	2.92					
				1430	0.1200	2.95					
				1630	0.0	2.95					
				1635	0.4800	2.99					
				1750	0.0	2.99					
				1800	0.1800	3.02					

NOTES: To convert CFS to I<sup>3</sup>/HR, multiply by 0.00041881. Precipitation is Thiessen average of 2 rain gages.



EVENT OF OCTOBER 22 - 24, 1971  
ABOSKIE, NORTH CAROLINA WATERSHED W-A3

AREA: 1664.00 acres 2.60 sq. miles

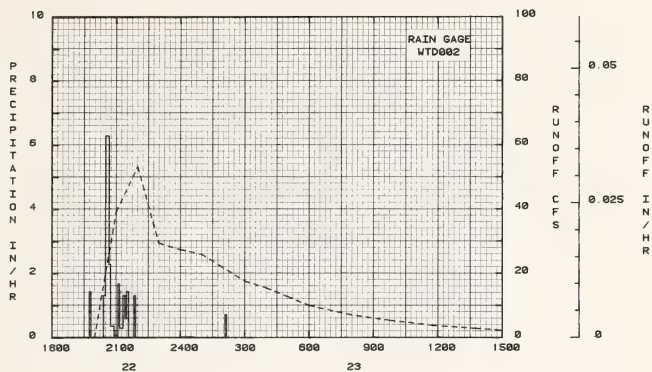
NOTES: Watershed conditions: Woodland, 60%; row crops, 39%; homesites, pastures, and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75-1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-71 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

NOTES: Watershed conditions: Woodland, 60%; row crops, 39%; homesites, pastures, and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds, the United States, 1965, USDA ARS Pub. 1216, p. 75-1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-71 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 7 yr (1965-71) record period.

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EVENT OF AUGUST 22 - 23, 1971  
ABOSKIE, NORTH CAROLINA WATERSHED W-44

